The Boston Medical and Surgical Journal

TABLE OF CONTENTS

October 12, 1916

Original Articles.

WERE THE SAILORS OF COLUMBUS THE FIRST EUROPEAN SYPHILITICS?

BY ANDREW F. DOWNING, M.D., CAMBRIDGE, MASS.

THE theory of the American origin of syphilis was first advanced four centuries ago. I use the term "theory" notwithstanding the opinions of those who are convinced that Iwan Bloch has given us conclusive proof. Today it is not unusual to read, in our medical journals, the unqualified statements of American physicians that syphilis was introduced into Europe by the returning sailors of Columbus; and even the laity are frequently heard to express the same opinion. From an American point of view, the discovery of this continent by the Italian, Christopher Columbus, is the most important as well as the most romantic event in the history of the world. Therefore, no American physician with a sense of pride or justice ought to be willing to admit, if it cannot be absolutely proved, that the price of the discovery of this new world in which he lives was that frightful epidemic of syphilis that devastated Europe during the last few years of the fifteenth and the beginning of the sixteenth centuries. To smear romance with the melancholy of venereal disease may delight the perverted mind of the unsentimental iconoclast; but to allow him to teach a rising generation, already wise in its knowledge of the social evil, to associate a loathsome disease with a great historic event, is to condone an unpardonable insult to the memory of Christopher Columbus. It is the purpose of this paper to analyze, in the light of actual historical evidence, the principal arguments that are supposed to prove the American origin of syphilis.

To avoid confusion, all discussion of other theories is waived, and I shall consider the story of the beginning of syphilis only as it may or may not relate to the actual known facts of the discovery of America by Columbus.

On August 3, 1492, Columbus set sail from Palos, Spain, with three vessels and a crew of about ninety men. An alien with a Spanish crew, if we except an Irishman from Galway, a converted Jew, and an Englishman, he was facing a difficult task as he headed his ships into the "Sea of Darkness." His largest and only decked vessel was the Santa Maria, of about one hundred tons burden, the length of which has been estimated at from seventy-five to ninety feet. The two other vessels were the Pinta and the Niña, both undecked, the lengths of which have been estimated as fifty and forty feet respectively. The crew of the Santa Maria, including Columbus and the officers, numbered about fifty-four men; that of the Pinta, eighteen, and the same was true of the Niña. On October 12, 1492, he landed on the island he called San Salvador, and after a short stay there cruised around among the islands, several of which he visited, including Cuba, where the records place him from October 28 to November 12. On November 20 he was deserted by the Pinta, under the command of Martin Pinzon. On December 6, 1492, Columbus, with the Santa Maria and the Niña, arrived at Hayti, where on Christmas Day the Santa Maria was wrecked. As John

Fiske remarks, "His armament was now reduced to the little undecked Niña alone, such a craft as we should deem about fit for a summer cruise in Long Island Sound."

For the purpose of reckoning a possible time of infection, it is important to notice the date of the arrival in Hayti, because this island is supposed to be the home of syphilis according to those who advance its American origin. It is probable, too, that the Pinta, before she again joined Columbus, spent most of her time here also, and therefore the approximate date of exposure of her crew would correspond to that of the crews of the other two vessels.

Having now only the little Niña, Columbus was obliged to leave at Hayti a colony of thirty-nine men, at a place called Navidad in honor of the Feast of the Nativity, on which day the Santa Maria was wrecked. This little group now falls out of our story, because, on his return about a year later, Columbus found them annihilated, murdered probably by the natives. They surely played no part in the origin of European syphilis. On January 4, 1493, he set sail for Spain, and two days later, on the northern coast of Hayti, came up with the Pinta, whose commander had been delayed trading with the natives and searching for gold.

In the two vessels there were about fifty men, exclusive of the ten Indians that were being carried back to Spain. From February 12 to 16, they encountered such a terrible storm in mid ocean that they gave themselves up for lost. During the storm, the vessels became separated, not to meet again until they were anchored in the harbor of Palos. "Those who have seen a gale of wind with a heavy sea in the latitude of the Azores," says Clements Markham, "can imagine the critical position of a leaky little boat of forty tons like the Niña, rising on the top of a huge Atlantic wave, then plunging into the trough, with the mountainous billows foaming around higher than her mast-head, then rising and plunging down again, the slightest inattention to the helm making destruction certain, while green seas washed over her fore and aft." There must have been at least a few of the twenty-five men aboard able to devote to their own safety an almost superhuman effort. On March 15, 1493, the Niña reached Palos, and Martin Pinzon with the Pinta, on the evening of the same day, also put into the harbor. A few days before, he had arrived at the harbor of Bayonne in Galicia.

As far as we know from the records, and they are quite full, every member of the crews of both vessels was alive and well. One Indian had died on the very day that the Niña arrived, and three others were too ill to travel farther than Palos. No champion of the American origin of syphilis has tried to prove that the death or the sickness was due to syphilis. In the letter of Columbus, written in February, 1493, and dated on board the Niña, there is no mention or suggestion of any strange disease. There was on the Niña a physician, Maestro Alonzo of Moguer, who would undoubtedly have reported to Columbus the presence of any new malady among the sailors. If these men were infected in Hayti, there was ample time for some symptoms to appear while they were still on the ocean. The voyage home in those open boats in rough weather, under sanitary conditions that must have been appalling, ought to have been marked, ina few cases at least, by symptoms of early syphilis, which in that day was almost malignant, and frightful even in its initial stage.

Fracastor's description is of a disease that would not have escaped attention. "Animum tristitia quaedam detinebat," he says. Depressed spirits, pallor, lassitude, foul ulcers of the genitals, sores on the lips, tonsils, and nose; terrible pains in the joints, bones, muscles, and nerves; emaciation, no desire for food, swelling of the legs and face, loss of hair, fever and prostration (*amor decubitus*)—these were common and even early symptoms in that first epidemic. Perhaps sufficient time had not elapsed to produce any secondary symptoms, but it seems impossible to believe that if there were infected men in either the Pinta or the Niña, they could have escaped the notice of their companions. The gossip of the sailors about a new venereal disease would have excited the curiosity of the people quite as much as the appearance of the Indians. These men had weathered a severe storm; they were exposed to cold and wet, and were in want of food; and yet they brought their vessels safe to port,—a feat that could hardly have been accomplished if *amor decubitus* had been the rule.

From Palos, Columbus went overland to Seville, which he entered triumphantly on Palm Sunday, 1493. He was accompanied by Juan Niño, master and part owner of the Niña, by the pilots and several seamen, and by six Indians. In that crowd of spectators was Las Casas, destined to be one of the great men of the world, and the most trustworthy historian of Columbus. He was then but twenty years of age.

After spending several weeks in this city, Columbus was summoned to attend court in Barcelona, where he arrived, after making the journey by land, about the middle of April. In the parade around the city we are told that he was preceded by the Indians and by sailors of the Niña. It will be remembered that Martin Pinzon deserted him with the Pinta and received a cold welcome when he arrived at Palos. Pinzon, who was then about fifty years of age, died three days after his arrival. His crushing reproof from the Spanish court, forbidding him to appear in the presence of the sovereigns, is supposed to have hastened his end. There is no mention of the sailors of the Pinta, and it may be that on account of the desertion of their master and his subsequent death, they had no desire to accompany Columbus to Barcelona.

All these facts must be grasped in order that

we may get some estimate of the possible sources of infection in Barcelona. It is probable that not more than twenty-five of the sailors were present, and if most of them were infected they must have been in the midst of severe secondary symptoms. Yet of such conditions there is no trustworthy contemporary record, although Bloch cites that of Diaz de Isla, which I shall consider later. On May 28, 1493, Columbus left Barcelona and immediately began to prepare for his second voyage, on which he embarked at Cadiz, September 25, 1493, with seventeen vessels overcrowded with fifteen hundred men.

The physician on this voyage was Dr. Diego Alvarez Chanca of Seville, a man of high reputation for skill and learning. He was ordered to join the expedition, not only to take medical charge, but also to report upon the rare and unknown plants of the Indies. Evidently he was a man of more than ordinary education. In a letter to Spain in the latter part of 1493, he makes no mention of any new diseases. This is also true of the letter of Columbus dated January, 1494. Of sickness there was plenty, but it was due to the hardships of the voyage, the salt provisions, the mouldy biscuits, the water, and the climate. "One-third of the people," says Chanca, "have fallen sick within the last four days, which I think has principally arisen from the toil and the privation of the journey. Another cause has been the variableness of the climate." The letter of Columbus mentioned above confirms this statement. Moreover, although the journal of the second voyage of Columbus is lost, much information concerning it was given to Bernaldez by Chanca. Besides, on his return from the second voyage, Columbus stayed at the house of Bernaldez, who thus heard the story of that voyage from the Admiral himself, while it was still fresh in his mind. Columbus also left with him written memoranda which Bernaldez used in his Historia de los Reyes Catolicos, which is considered the highest authority on this particular voyage. In it we can find no mention of this new disease, although the author was in possession of many facts that he obtained from Chanca.

On the 2d of February, 1494, Antonio Torres, in command of nine of the vessels, sailed on the return voyage to Spain. In July, 1494, Margerite, one of Columbus's lieutenants, deserted his post, and seizing three vessels sailed away to Spain with a number of other deserters. This man had been in command of a fort in Hayti, where his rule was characterized by idleness, robbery and the outraging of women. These events put back in Spain in 1494 a part of that second expedition. In June, 1496, Columbus himself returned with two vessels overloaded with more than two hundred homesick passengers, a haggard and starving company.

The story of Columbus for the present purpose need be pursued no further, but these historical facts seem to be necessary in order to show the impossibility of adjusting to them the evidence on which Iwan Bloch rests his case. Here it will be well to ponder over the words of John Fiske, who says, in speaking of historical blunders that arise from things that are spoken: "In order to arrive at historical truth, it is not enough to obtain correct items of facts; it is necessary to group the items in their causal relation and to estimate the precise weight that must be accorded to each in the total result. To do this is so often difficult that half truths are very commonly offered in place of whole truths; and it sometimes happens that of all the forms of falsehood none is so misleading as the half truth."

The first main fact in the evidence is a letter of Peter Martyr, dated 1488, and addressed to Pedro Arias Barbossa, professor of Greek at Salamanca. Martyr was born in 1457 and died in 1526. His voluminous correspondence consists of eight hundred and thirty letters, which were assembled in 1530 by Alcala des Henaris and later, in 1670, re-edited at Amsterdam. In the letter referred to, Martyr mentions the morbus gallicus. "Ario Lusitano Graecas Litteras Salmanticae Profitenti; Valetudenario. In peculiarem te nostrae tempestatis morbum (qui appellatione Hispana Bumarum dicitur) ab Italis morbus Gallicus, medicorum Elephantiam alii, alii aliter appellant, incidisse praecipitem, libere ad me scribis pede," etc. "To Arios of Portugal, Professor of Greek at Salamanca, good health:—You write me freely that you have suddenly fallen into that peculiar disease of our own time which is called by the Spanish name Bubas, by the Italians, Morbus Gallicus; some doctors call it Elephantia, some other names." Bloch cites Von Ranke, Schumacher, and Bernays as proof that several of Martyr's letters are wrongly dated. Bernays points out that this letter in particular must bear the wrong date, because the history of the University of Salamanca shows that there was no chair in the Greek language until 1508. Now as long ago as 1823, Dominico Thiene, an opponent of the American origin of syphilis, mentions this same letter and refuses to accept it as evidence for the same reason. Our own historian, William H. Prescott, also an opponent of the American origin, remarks that Thiene does not cite his authority for limiting the introduction of Greek at Salamanca to 1508. Prescott states that it was probably Pedro Chacon, who in 1569 compiled the history of the University. "The accuracy of his chronology," he says, "may well be doubted from a gross anachronism on the same page with the date referred to, where he speaks of Queen Joanna inheriting the Crown in 1512." Prescott then gives evidence that Barbossa was a professor of Greek at Salamanca in 1488 by citing a letter of Barbossa's pupil, Andreas Resende. "Arias Lusitanus quadraginta, et eo plus annos Salmanticae tum Latinas litteras, tum Graecas Magna Cum Laude Professus est." (Responsio ad Quevedum apud

Barbossa, Bibliotheca Lusitana, tom 1, p. 77.) "Arias of Portugal, for forty years and more, taught at Salamanca with great credit not only the Latin language, but also the Greek." Barbossa died in his native Portugal in 1530, where he passed several years before his death, and therefore this letter places him at Salamanca at the time indicated by Martyr.

Furthermore, Rashdall states that Salamanca was one of the five universities at which the Council of Vienna in 1312 directed that "Professors of the Greek, Arabic, Chaldee and Hebrew languages should be maintained." This University was founded about 1230, and by the sixteenth century was one of the largest in Europe. The higher education of women had already begun there. It was from Salamanca that Queen Isabella summoned the brilliant Dona Beatrix Galindo to teach her Latin. Here also Dona Lucia de Medrano publicly lectured on the Latin language. The matriculation book in 1552 gives the names of 6328 students. It is indeed strange to find such a progressive institution lacking a chair in Greek before 1508, and it is an amusing fact to find that the argument in favor of the American origin of syphilis must be constructed on the absence of a Greek professorship at a great university. Even if we concede at the outset this one point to Bloch, we have at least shown that if Greek was not taught at Salamanca before 1508, Martyr's letter must have been written fifteen years or more after the discovery of America, and its author, had he heard of the American origin of syphilis, would undoubtedly have mentioned the fact together with the other terms which he used in commenting on the disease.

The evidence most emphasized by Bloch comes from a Portuguese physician, Ruy Diaz de Isla, who was born in 1462 and died in 1542. This physician is the author of two works published in 1539 and 1542, respectively. He is supposed to have been in Barcelona in 1493, where he witnessed the reception to Columbus on his return from the New World. Later he practised in Seville, and afterwards spent ten years as surgeon at the Hospital of All Saints, in Lisbon. Modesty was not one of his virtues. He wishes to impress us with his long experience. He says that he is convinced that syphilis came from the island discovered by Columbus, and that it is contagious in its own peculiar way. It was easily acquired and soon manifested itself in the fleet in the case of a pilot from Palos named Pinzon, and in others in whom the aforesaid disease was advancing. This statement, upon which Bloch lays so much stress, is taken from an edition of de Isla's, known as the Codex, which was first published between 1510 and 1520, and is supposed to have been discovered in the national library of Madrid by Montejo, a Spanish physician. Bloch tells us that he was born in 1825 and died in 1890. Montejo's first work on the history of syphilis appeared in 1857. The Codex is dedicated to King Manuel of Portugal, who died in 1521. Proksch remarks that the date 1510 is certainly erroneous because in this book an event of 1514 is mentioned. It was written then, not earlier than 1515, and this places it more than twenty years after the discovery of America. I cannot appreciate Bloch's enthusiastic remark that this important work is twenty years older than the edition of 1539.

In the Codex occurs the following passage: "Segun que por muy larga y cierta esperiencia se ha hallado, y como esta ysla fuese descubierta y hallada por El Almirante Dom Cristoual Colon al presente teniendo platica y comunicacion en las yndias Como el de su propia calidad sea contagioso, facilmente se les apego. E luego fue visto em la propia armada *em hun piloto de Palos que se llamava Pincon* y en otros que el dicho mal fue prosiguiendo." (This is the passage that I have rather freely translated in the indirect quotation in the preceding paragraph.) Compare this with the passage taken from the edition known as "tractado Contra el Mal Serpentino," published in Sevilla in 1539: "Segun que por muy larga y cierta esperiencia se ha hallado. E como esta ysla fue descubierta y hallada por el almirante don Xrisptoual Colon, al presente teniente platica y comunicacion con la gente d'lla. E como el de su propria calidad sea contagioso facilmente seles apego: y luego fue vista en la propria armada." It requires no knowledge of Spanish to see by mere inspection that these passages are almost identical except in the last line, in which Pinzon is definitely accused of being syphilitic.

One cannot help asking if the Codex is an edition that has been tampered with by inserting this accusation against a prominent member of the first crew of Columbus. If the Codex was really written by Diaz de Isla, did its author put it aside through fear of publishing it during the lifetime of Vincente Pinzon? Moreover, if it was published as early as 1515, when Pinzon was still living, why is it that we have no record either of Pinzon's own protest against it, or the protest of his family? Is it possible that the supporters of the American origin of syphilis, in order to strengthen their case, have deliberately made this charge? Almost a quarter of a century had elapsed since the date of the return of the Admiral from that first voyage, and yet no other writer had made any mention of the presence of the disease in that first crew.

Bloch praises de Isla as a skillful physician, with a deep knowledge of syphilis and its treatment, but he lacks a sense of humor when he tries to excuse the assertion of de Isla that syphilis in its pustular form attacks vegetables, especially the cabbage. In 1823 Thiene refused to accept the evidence of de Isla on the ground that Girtaner did not give his authority for the facts concerning the life of this physician. Furthermore, Thiene objected to the lack of the testimony of eye witnesses to support the statement of Bloch's authority concerning the pres-

ence of the disease among the members of the crew. That objection holds good today. Both the man and his publications are historical mysteries that leave our minds clouded with a doubt. We cannot consider seriously the testimony of the originator of "cabbage syphilis."

Bloch calls to his aid the historian Oviedo, whom he characterizes as a distinguished courtier, and one of those scholars frequently met with at the time, who even in early youth had acquired a many-sided culture. He was born in Madrid in August, 1478, and in his thirteenth year became page to the son of Ferdinand and Isabella, the Infante Don Juan. He was, therefore, hardly fifteen years of age when he witnessed the reception at Barcelona on the return of Columbus in 1493. From 1497 to 1502 he was in Italy, when he returned to Spain, where he lived until 1514, the year in which he made his first voyage to the New World. He is the author of a history of the Indies. Of this work, Las Casas remarks, "It contains as many lies as pages."

"He possesses an art far from skillful," says Justin Winsor. "He is extremely incorrect in his narration of the first voyage of Columbus," says Washington Irving, "and inserts many falsehoods told him by the enemies of the Admiral."

In his history, Oviedo remarks, "I laughed on many occasions in Italy when I heard the Italians call it the French disease, and the French call it the Neapolitan disease; and indeed they would both have hit upon the right name had they called it the disease of the Indies." From this statement we are led to believe that Oviedo, writing thirty or more years after the discovery of America, would have us think that he knew of the American origin of syphilis when he was between nineteen and twenty-four years of age, which was the period of his life spent in Italy (1497-1502). Again in the same paragraph he remarks that experience has shown that the wood of the lignum sanctum tree and the guaiac tree is the only cure for this terrible disease of the great pox; for so great is divine mercy that where our sins produce a punishment, God sends a remedy. He talks of his acquaintance with a number of those who were on the first and second voyages of discovery. Among them we find Margerite, who deserted Columbus on the second expedition and returned to Spain in 1494; Vincente Pinzon, with whom he says he had a close friendship until Pinzon's death, in 1514; the pilot, Hernan Perez Matheos, who, he states, was with Columbus on his first voyage.

Matheos was not a member of the first crew of Columbus, and Pinzon did not die in 1514. He was ennobled in 1519. Margerite he accuses of being a syphilitic, and says that he walks so painfully that he suspects that this man is in the grip of syphilis; but he hastens to add, "*I did not see the pustules.*" His statement about Pinzon lacks clearness, and it is difficult from the text to interpret the exact meaning. Whether he means that Pinzon was a syphilitic, or that the latter gave him much information about the disease, is a question. In another part of his history he makes a false statement about the voyage of Pinzon and Solis to the Gulf of Honduras. He says that they set out in the autumn of 1506, but it has been proved that this voyage did not take place until 1508. It is the opinion of many historians that Oviedo deliberately falsified this fact in order to detract from the work of Columbus. Bloch gives the impression that Oviedo's mention of Vincente Pinzon is a declaration that Pinzon had the pox, and that this agrees with the statement of de Isla concerning the infection of the pilot of Palos. Bloch rejoices that de Isla and Oviedo, without any apparent collusion, have agreed in this particular statement. It does not seem probable that Oviedo, when a lad of fourteen or fifteen years of age, was taken into the confidence of men like Vincente Pinzon, and made a companion. If this historian knew as much as he pretends to know about this disease, he would have known at the time he wrote his history that guaiac as a sure cure for syphilis had been proved a failure, and that mercurial therapy had already been established. Therefore, in consideration of this historian's many errors and deliberate falsehoods, it is impossible to accept as authentic the evidence he has presented.

Pellier, who has blindly followed Iwan Bloch in his acceptance of this latter's story of Columbus, makes the following amusing statement: "De Isla has been critiecized for not having the support of an eye witness, and Oviedo for his prejudiced point of view, but Las Casas has preserved intact his halo of goodness, and his testimony in favor of pre-Columbian syphilis is absolutely beyond contradiction." Evidently he has no confidence in de Isla or Oviedo, and appeals to the reputation of Las Casas rather than to the value of Las Casas' evidence. This historian was born in Seville in 1474, and died at Madrid in 1566, at the age of ninety-two. In 1502, at the age of twenty-eight, he made his first voyage to the Indies, where ten years later he was ordained a priest. His great work, and the one that concerns us, is the history of the Indies, which was completed in 1561, when its author was eighty-seven years of age. This work is looked upon by all his historians as the final authority on important matters relating to the voyages of Columbus and the early settlements in the new world. It has been called the cornerstone of American history. Las Casas spent most of his life in the newly discovered world, where his influence, his skillful diplomacy, his finished education, and his fearlessness made him a tremendous power. All agree that in any period of the history of the world, he would have been one of its foremost men. Bloch says that Las Casas made his first voyage to the Indies in 1498, a fact that was

long ago disproved. His first visit was in 1502, a date important to note, because by the time Las Casas arrived, syphilis was widely spread among the inhabitants of the new world. The passage which Bloch cites from this author is in the fifth volume of the Historia, which was written when Las Casas was at least eighty-five years of age, about sixty-five years after the discovery of America. A translation of that passage follows:—

"There were and still are in this island two things which in the beginning were very dangerous to the Spaniards. One is the sickness of Las Bubas, which in Italy is called the French disease. It is the truth, however, that it came from this island with the first Indians when the Admiral Christopher Columbus returned with the news of the discovery of the Indies. The Indians I saw afterwards in Seville, and they may have brought the disease into Spain either by infecting the air or in some other way; or it was brought by some Spaniards already infected, in the first return voyage to Seville. This could be from 1494 to 1496. Moreover, at this time King Charles of France passed into Italy with a great army, which became afflicted with this contagion. For this reason the Italians think that it was spread by these soldiers, and from this time on they called it the French disease. I asked several times the Indians of this island if this disease was very old, and they replied that it was present there before the first Christians came. In fact, its origin was beyond their memory, and this no one ought to doubt.

"It appears, however, that Divine Providence has provided for it a special medicine which is, as I have stated above, the wood of the guaiac tree. It is especially noticeable that all the Spaniards who did not practise chastity were infected, and not one in a hundred escaped if the woman had the disease. The Indians, men and women, who have it are very little troubled by it, no more than if they had smallpox, but the Spaniards are painfully afflicted and are in great and continual torment, especially before the pox break out."

In the earlier chapters of the Historia, in which Las Casas shows such an intimate knowledge of the voyages of Columbus, he does not mention the disease in connection with the Indians or the members of the crew. Remember that he wrote the passage quoted above years afterwards, when he was undoubtedly influenced by the theory that the infection was brought from the Indies. His inquiries of the natives concerning syphilis cannot be given serious consideration, because neither he nor the natives knew enough about the disease to hold an intelligible conversation. Bloch himself characterizes as utterly worthless certain descriptions of and references to diseases of the genital organs by ancient and medieval authors that could easily be taken as indicating syphilis. Yet he does not consider that the Indians with whom Las Casas talked may have had some other disease in mind, and that consequently their opinions are as utterly worthless as the descriptions of our ancient, but highly civilized and educated, authors. Las Casas arrived in the New World at a time when the disease had already been brought from Europe, and he must have been impressed by its malignancy in that first epidemic. Like Oviedo, he also observes that although Providence has inflicted this disease upon the natives of Hayti, divine justice has made some compensation by providing on the island a cure in the guaiac tree. I wonder what Las Casas would have thought had he known that the mercy of Providence was truly expressed in those ancient quicksilver mines in Almadén, in his native Spain, from which, for centuries before and after his time, the world derived its largest supply of the real cure for syphilis. Would he have thought that the pox was of Spanish origin, or would he have clung to his first belief and decided that this wonderful deposit of mercury in Almadén was intended for the ills of the poor heathen, to whom Columbus, under the patronage of Spain, was sent as an instrument of Divine Providence?

When he wrote this chapter, Las Casas evidently did not know the value of mercurial treatment. Moreover, Fracastorius, one of the few men of mighty intellect that have graced our profession, had refused already, at this time, to accept the theory of the American origin, and had written his poem, Syphilis sive Morbus Gallicus, which contains a vivid description of the treatment by mercurial inunctions. Had Las Casas been familiar with the discussions of the time concerning this disease, he would undoubtedly have given some thought to the opinion of the learned author of this poem. In that nineteenth chapter of the fifth volume of the Historia, he was simply expressing some random thoughts that should not be interpreted too literally. His work in the world was far more important than Bloch seems to realize. To reduce him to the rôle of an amateur syphilographer is as ridiculous as to cast the star in the rôle of one of the strolling players in Hamlet. The American physician who would know him intimately can find no more profitable task than the reading of the story of Las Casas and his brother Dominicans of that little monastery in Guatemala. "We cannot make him anything else," says John Fiske, "but an antagonist of human slavery in all its forms, and the mightiest and most effective antagonist that has ever lived. Subtract his glorious life from the history of the past, and we might still be waiting, sick with hope deferred, for a Wilberforce, a Garrison, or a Lincoln."

Although Bloch is always ready to quote Las Casas in support of his pet theory, he ignores that author's story of the first voyage of Columbus, which is recognized as authentic by every genuine historian. For instance, he gives the

number of men on the first voyage as one hundred and twenty, instead of ninety; he assumes that in the various places which Columbus visited, there was nothing but the outraging of women. He tells us that none of the crew of the Niña went ashore at Saint Mary's of the Azores on the return voyage. He gives the date of arrival there as February 15, 1493, when the correct date is February 18. Las Casas is our authority for the statement, accepted by every historian of reputation, that half the crew went ashore to visit a chapel to give thanks for their safety, and while there, were surrounded by an armed body of Portuguese, who held them on the island as prisoners for five days.

When the Niña reached the mouth of the Tagus, in Portugal, on March 4, 1493, she anchored at the entrance off the village of Rostello, where crowds of visitors came in boats from Lisbon to see the ship during the next few days. Bloch emphasizes the fact that the crew did not land, but gives no absolute proof. At any rate, we know that they had an opportunity to mingle with the natives. He then gives a clean bill of health to the people of Bayonne in Galicia, where Martin Pinzon arrived with the Pinta and remained several days. Montejo is his authority for the statement that there were no prostitutes among the women in that place, and therefore there was no opportunity for the crew of the Pinta to spread the disease. Bloch is so anxious to show that there was no possibility of these sailors infecting the inhabitants of the Azores or Portugal or Galicia, that he deliberately disregards the authority of Las Casas. It was not impossible for these men, if they had the pox, to infect the inhabitants of these places, but we have no record that they did.

After Columbus reached Palos, we are told by Bloch that he proceeded to Seville with the Niña. When the festivities in this city were over, it will be remembered that Columbus went overland to Barcelona, where the Spanish court was sitting. According to Bloch, Columbus made the journey to Barcelona in the Niña in company with his entire crew. It was the intention of Columbus to make this trip by water, but every authentic writer states that he changed his mind. Bloch's purpose is obvious. He wishes to keep the members of that crew together until they reach Barcelona, where he maintains that an epidemic of syphilis appeared while Ferdinand and Isabella were still in the city; and, therefore, he can better attain his end by having them make the journey together by water, first from Palos to Seville, and again from Seville to Barcelona. To trace this reconstructed and false story of Columbus any longer is a waste of time. We may leave it with the feeling that the author "doth protest too much." After his weary vigil over the crew on that return voyage, necessitated by his altruistic concern for the people of the Azores, Galicia, and Portugal, Bloch must feel relieved, when, at last, in the presence of Diaz de Isla, he turns loose in Barcelona his shipload of syphilities to contaminate the people and the cabbage patches of the city.

This is the case of Iwan Bloch, who has attached his chariot to a fallen star named Montejo. He has failed in the evidence to show that the pox was brought back to Europe by Columbus. Nearly a quarter of a century had passed after the discovery of the Indies, before the American theory was advanced, and during that time the French, Italians, and Spanish called it by names that threw it in one another's teeth. De Isla and his books belong in the borderland of mystery, far beyond the pale of true historical fact. The testimony of Oviedo is merely a babel of dissonant inaccuracies and mystifying untruths. Las Casas has given us no positive proof that the pox was present in the crew, or that its origin was in the Indies. What he says of this disease can by no play of the imagination be interpreted as incontestable historical fact. It bespeaks the reminiscent and meditative mood of the moralist and churchman, rather than the precise pen of the historian. Like many another good man who has been called to the witness-stand as an expert, he has been deliberately and shamelessly sacrificed to expediency. "Would that mine adversary had written a book," said Job, and ever since those days of the Old Testament, down through the length of centuries, no pleader for the prosecution or the defence has failed to remember its meaning, to the dismay, and too often to the unjust humiliation, of a multitude of expert witnesses. The testimony of Las Casas, where it is of no value, is eagerly pounced upon by the prosecution, and distorted and exaggerated; but where it may unequivocally be classified as "expert," it is absolutely and even arrogantly ignored. The most trustworthy opinion from the past comes from the talented Fracastorius, a contemporary of that first epidemic, and his decision, almost four hundred years ago, is against the theory resurrected by Bloch.

After weighing carefully all the facts of this evidence, so vague, so incredible, so suspicious, I cannot help remarking, in the language of the underworld, that Christopher Columbus and his little band of sailors have been "framed." On evidence of such a character, the most rabid district attorney of modern times, elected on a platform pledged to the flaying of wicked trusts, could hardly hope to secure an indictment against the most depraved malefactor of wealth, from a grand jury of socialists.

Let the American physician, therefore, who wishes to appear erudite, display on the public platform more than a schoolboy's knowledge of Columbus, that he may avoid the inexcusable blunder of making himself an unwitting accessory to an historical abortion. Let him remember that in the entire history of the world, there

can be found no more splendid lesson of perseverance, and courage, and amazing achievement, to teach to each succeeding generation, than the untarnished story of Christopher Columbus and his crew. Let him be ashamed to link this historic event with the curse of the spirochete, and let him often pay to the discoverer of his country the tribute so aptly quoted by Professor Edward Channing,

"What if wise men as far back as Ptolemy
Judged that the earth, like an orange, was round,
None of them ever said, 'Come along, follow me!
Sail to the West, and the East will be found.'"

BIBLIOGRAPHY.

Iwan Bloch: Der Ursprung der Syphilis. Jena, 1901.
John Fiske: The Discovery of America. Vols. 1 and 2.
Justin Winsor: Columbus; *also* Narrative and Critical History of America.
Washington Irving: Life of Columbus.
Clements Markham: Life of Columbus.
Edward Channing: History of the United States.
William H. Prescott: History of the Reign of Ferdinand and Isabella. 3 vols.
Pellier: Les Origines de la Syphilis. Paris, 1908.
Las Casas: Historia de las Indias: Madrid, 1875-76, Vol. v, Chap. 19.
Oviedo: Historia General de las Indias. Madrid, 1851, vol. i, Chap. 14.
Domenico Thiene: Sulla Storia De' Mali Venerei. Venice, 1823.
Fernandez Duro: Colon y Pinzon. Madrid, 1883.
Fracastorius: De Contagionibus.
R. H. Major: Select Letters of Columbus. London, 1847.
Rashdall: Universities of Europe in the Middle Ages. London, 1895.
Lancereaux: A Treatise on Syphilis. Paris, 1866.
Sir Arthur Helps: Life of Las Casas. London, 1868.

Massachusetts Anti-Tuberculosis League.

SECOND ANNUAL MEETING AND CONFERENCE, APRIL 27, 1916.

OPENING REMARKS OF THE PRESIDENT.

BY VINCENT Y. BOWDITCH, M.D., BOSTON.

AT this, our second annual meeting, it is well for us to ponder upon the purpose of our League, to take account of what has been accomplished during the past year, and to see wherein we can accomplish the greatest good in the months to come. We cannot emphasize too strongly the purpose for which the League was established, viz.: to keep watch upon the work which is being done throughout the State, to note and encourage those communities where work is being actively done, to stimulate to action those in which possibly there has been, and may still be, indifference as to the importance of all anti-tuberculosis work.

Most, if not all, of you are familiar with the leaflet sent out by our secretary last autumn, signed by our Commissioner of Health, Dr. McLaughlin, by Dr. A. K. Stone, and myself as Chairman of the Trustees of the Massachusetts Hospitals for Consumptives and President of this League respectively. This leaflet was published to counteract a possible tendency towards the belief that, in consequence of the increase in the number of anti-tuberculosis societies, there is no further need of agitation of this question, which means so much to the health of our State and country.

Strong influence has already been brought to bear upon our legislature by our League in matters of vital importance to the anti-tuberculosis question. Coming as the united opinion of an association, such influence carries greater weight than that emanating from individual effort, no matter how earnest the latter may be.

The results accomplished by our Health Commissioners during the past year in enforcing laws made for the establishment of dispensaries and hospitals in certain communities of Massachusetts have been most gratifying. I feel sure, however, the Commissioners would be among the first to acknowledge the help obtained by the expressions of opinion from, not only our League, but from the Trustees of the Massachusetts Hospitals for Consumptives and others before the legislative leaders.

Much remains to be done, however, and far from feeling that the necessity for such organization as this is lessening, I know that those who are most conversant with facts believe that there never was greater need than now for persistent endeavor on our part to push through legislation in the future. In this connection, I heartily recommend for the perusal of all of our members the admirable paper by Dr. Eugene R. Kelley of the Department of Health, upon Tuberculosis Dispensaries, printed in the Public Health Bulletin of October, 1915, Vol. 2, No. 9. While he naturally recognizes that the work is far from perfect, and leaves much to be desired, yet the fact that the fifty-four cities and towns of Massachusetts which now maintain a dispensary service represent approximately 80 per cent. of the population of the Commonwealth, is very encouraging, considering the comparatively short time since this movement was begun.

It is the function of this League, moreover, to keep watch upon the work thus far accomplished and to see that it does not lag from lack of interest.

Striking examples of what has been admirably done in certain cities and towns are now before us. I cannot refrain from singling out one or two which have come under my special notice, as being an inspiration to others who may be beginning.

No one who has studied the facts about anti-tuberculosis work in New Bedford and who has visited the admirably arranged Sassaquin Hospital in the suburbs of that city, can fail to be struck by the possibilities of what can be done to alleviate the sufferings of the poorer classes and to lessen the ravages of tuberculosis. This hospital, with its remarkable atmosphere of cheer, among even the sickest patients, its practical and at the same time economical construction, may well serve as an example for others to

follow. The fact that it has already been able to cope successfully with the difficult question of the hospitalization of far-advanced cases in New Bedford, that it combines also the elements of a sanatorium and an open-air school for tuberculous children, and finally that it is eagerly sought out by patients and their friends, is one of the most helpful and inspiring examples of what can be done that I know. The fact that that has been largely the work of one of our most zealous and efficient anti-tuberculosis workers, the Rev. William Geoghegan, deserves special mention.

Incidentally, it is an interesting fact that the origin of this movement in New Bedford came from among the foreign class,—the Portuguese, who began with a very small and quite inadequate collection of mere huts for the reception of far-advanced cases. It speaks equally well for the spirit among these people that they cheerfully placed the work which they had begun into the hands of Mr. Geoghegan and his associates, without demanding special recognition or special privileges for themselves. The remarkable growth of the institution in five years, its removal to an excellent situation in the suburbs, is due to the enthusiasm and ability of well-known citizens, notably the late Dr. William N. Swift, and especially to the unremitting zeal of Mr. Geoghegan.

Beverly is another instance of a city which has made a striking advance in grappling with this question during the past year, largely due to the energy and enthusiasm of those who began the work there—members of our League.

In thus singling out these striking instances, one recognizes also that in many directions throughout the State progressive work is being admirably done, which augurs well for the future.

One need not necessarily be a member of any local anti-tuberculosis society, but as a member of our League he can effectively use his influence in various matters which bear upon the health of the community in which he lives. To help keep alive the knowledge that no patient should be put off by a hasty or careless diagnosis when he is showing persistent signs suggestive of tubercular trouble; to teach others the value of fresh air, good food, regular living, as a means of prevention of disease,—these are subjects in which every member of the League can use his personal influence with marked benefit to the health of all with whom he comes in contact.

In my opening remarks at our meeting last year I mentioned one feature of the anti-tuberculosis campaign which needs the thoughtful consideration of every one, viz.: the control of the incorrigible consumptive, who by wilful disregard of others, and in spite of protests, persists in filthy habits, thereby spreading infection.

Naturally there comes to most of us a repugnance to drastic methods in controlling such people, but it can and should be accomplished with firmness consistent with kindness and due regard to the rights of every one. Something must be done in this direction ere long if we are to be successful in controlling the ravages of tuberculosis.

The experience in Australia of Dr. Victor G. Heiser, ex-Director of Health, Philippine Islands, is very significant. By stringent measures there, he tells us that tuberculosis is fast becoming a controllable disease, and isolation of incorrigible cases is resorted to without delay. Incidentally, other methods which might well be adopted in our community have obtained in Australia, the details of which Dr. Heiser has given in his comparatively recent address in this country.* It should be read by everyone. In the State of Victoria, Australia, every physician who reports a case of tuberculosis is paid a fee of ten shillings ($2.50). The Health Department then sends a physician whose duty it is to follow the case. If the family is able to adopt proper precautions at home, the patient is left there and kept under supervision; otherwise, he is removed to a proper hospital or sanatorium. Thus far this method has been adopted, we are told, with perfect success. Why should we not do likewise? Even granting that social conditions possibly make these methods more easily adopted there than here, it should not discourage us in our efforts to bring about the same desirable results. As stated last year, up to 1912 four States had made laws relative to the care of incorrigible consumptives,—New Jersey, New York, Wisconsin and Minnesota,—but the marked dissimilarity in legislation makes it difficult to judge of the comparative advantages of each. Results in those States, however, do not compare at all favorably with those of Australia, as stated by Dr. Heiser.

An attempt was made last January to pass a bill through our legislature which should enable us to use strong measures with incorrigible consumptives, but, as was expected, the bill was not engrossed, for our people have not yet been educated to the point of insisting that suitable laws offered by our Health Commission shall not only be made, but enforced.

Here again comes the opportunity for the members of our League to influence those with whom they come in contact.

During the last year there has been an increase in the number of anti-tuberculosis associations which have joined the League. This is as it should be from the fact that an interchange of thought and presentations of the various aspects of anti-tuberculosis work can be best compared by such meetings as these. At the same time, it is absolutely necessary that standardization of work done should be a *sine qua non* of membership in our League. It would be composed of those associations only which are really active in anti-tuberculosis work; not of those which are such in name only.

In conclusion, I wish to emphasize three

* Journal of the Outdoor Life, January, 1916.

points already touched upon last year as among the most important in the anti-tuberculosis campaign.

First, we must have a more rigid enforcement of the present law requiring all cases of tuberculosis to be reported by the attending physician to the proper authorities. That such enforcement in the present state of public opinion may be at times wrongly a source of embarrassment to the physician in attendance must be recognized; at the same time, the public must be taught that registration, not necessarily meaning discomfort to the patient or friends, is absolutely necessary if the disease is to be brought under control in the future.

Second, a constant endeavor should be made to induce proprietors of mills, factories, and shops to watch the health of their employees more carefully and attend to the hygienic surroundings of their workers. While much has been done in this direction, there is vast room for improvement in the future.

Third, the establishment of open-air schools, not only for those already ill, but for those not afflicted but who need to be fortified against disease, should be urged. No one who has visited the open-air schools in the sanatoria at Westfield, and at Sassaquin in New Bedford, can fail to be impressed by what can be done by such measures to restore health to tuberculous children. I look forward to the day when similar methods can be adopted in all schools, with infinite benefit to the cause of Preventive Medicine.

THE PLAN OF THE STATE DEPARTMENT OF HEALTH FOR MORE TUBERCULOSIS HOSPITALS.

BY EUGENE R. KELLEY, M.D., BOSTON,

Director Division of Communicable Diseases, State Department of Health.

THE plan of the State Department of Health for more tuberculosis hospitals as incorporated in House Bill No. 2042, now before the General Court for consideration, is briefly as follows:

It frankly recognizes two important facts. The first is that there is now inadequate hospital provision for many communities in the Commonwealth, and, generally speaking, no local hospital provision for consumptives for towns of under 10,000 anywhere. The other fact that is equally apparent is that it is impractical and uneconomical to expect small cities and towns to erect and maintain individual hospitals for the care of their consumptives.

A possible way out of this dilemma is the one that was contemplated by the law now in effect, that is, authorizing cities and towns jointly to erect hospitals or to make arrangements for the care of consumptives from small places in hospitals in the adjoining larger cities and towns. From a practical standpoint, this plan has not been effective, and it is very evident that it never will be. The reason for this is very simple. The tendency is for each community to build scarcely enough beds for its own cases; therefore an agreement to care for patients from smaller, neighboring towns, of which there are several now in existence in the State, is always conditional upon there being available beds which are not desired for the inhabitants of the city that is maintaining the hospital. Such being the situation, it is evident that the only solution that will provide adequate hospital beds for consumptives is one which will procure beds that will be available to citizens of all the towns, no matter how small, when needed.

As a matter of practical experience in this State and other parts of the world, another consideration, only less important than having the beds at all, is the desirability of having these consumptive hospital beds available within reasonable access to the patients' homes.

After a long detailed examination of the situation and a discussion of all the possibilities, the State District Health Officers and the other officials of the State Department of Health unanimously agreed, from the showing made by the investigations of the District Health Officers, that it would not be feasible to put up any plan for coöperative hospitals, to serve a number of cities and towns unless it recognized the existing machinery of government. The only existing machinery of government that stands between the State and the individual cities and towns is the county government. Therefore, it was felt that the most satisfactory plan from a practical standpoint would be one which would utilize the already existing governmental agencies as represented by the county officials.

From the viewpoint of building hospitals only, it would, of course, be equally possible to have additional hospitals built by the State itself. There are several serious obstacles to this plan. In the first place, the State already has invested a very large sum of money in its five institutions for the care of the tuberculous. These institutions do not work out satisfactorily as advanced hospitals, although under present conditions the beds in these institutions are so largely monopolized by the type of case which really belongs in an advanced hospital that it is impossible for them to fulfill their proper functions as sanatoria for the arresting and curing of earlier, favorable cases.

A second and greater objection to the scheme of the State building additional institutions lies in the fact that many of the already existing city and private institutions could be readily enlarged to serve a very much larger district than the immediate city or town for whose use they are now exclusively maintained, but if the State began building additional hospitals it would mean that there would never be any extension of these institutions for the communities which are in close proximity to these local hospitals. From many standpoints, it is more desirable to utilize

these already existing institutions, if possible, and extend their area of service than to duplicate the already existing State sanatoria, which are in everyone's judgment already sufficient to supply the needs of the early cases if the advanced cases could all be taken care of nearer home.

A third and almost equally important reason why it is felt that the policy of having local hospitals is superior to that of duplication of State institutions is largely psychological, but the experience of many other States and communities has proved that it is a factor that must be seriously considered. It rests upon the general truth that the people of any community are always more inclined to take an active interest in an institution if it is their own and represents their own effort, energy and direct investment of money, and if their local officials are responsible for its success, than is the case if the institution is one maintained by the State.

The bill as now printed has been drafted from the beginning with the idea of carrying out these fundamental principles which have just been enumerated. In the beginning, the bill places upon the County Commissioners of the various counties an obligation, not necessarily to construct new hospitals and institutions, but to provide sufficient hospital beds for consumptives living within their jurisdiction in communities not already provided with adequate tuberculosis hospital facilities.

Section one further stipulates that these facilities shall be ready not later than the first of September, nineteen hundred and eighteen.

Section two is a very important section of the bill. It is an attempt to provide the necessary legal machinery whereby the use of already existing tuberculosis hospital facilities can be extended and broadened at a minimum of expense to serve a much larger number of the people of the Commonwealth than they do at present. With this point in mind, the section provides that by definite written contracts various arrangements can be carried out between the County Commissioners and the authorities in charge of already existing hospitals or the trustees of any philanthropic funds that are available for the construction of tuberculosis hospitals whereby adequate tuberculosis hospital provisions can be made for such sections of a county as can best be served by such an arrangement. The section further provides that in case of termination of such contract, ample time shall be allowed whereby the County Commissioners can fulfill their obligation to provide proper tuberculosis hospital facilities for the inhabitants of the county, that will need the same, by constructing such institutions.

Section three defines what "adequate" hospital provision is within the meaning of the act, viz., at least two beds for every three deaths from consumption as determined by a five-year computation for the communities served by such hospitals.

Section four exempts the cities of over 50,000 and the cities and towns of less than 50,000 that are already provided with adequate tuberculosis hospital provision from the provisions of the act, and excludes them from paying any part of the county tax that may be assessed for carrying out the provision of the act.

Sections five and six authorize the County Commissioners to erect institutions where they are needed with the important proviso that no new hospital shall be erected having a total capacity of less than fifty beds. This proviso is insisted upon because of the very obvious fact that hospitals of less than fifty beds are very expensive to maintain because of the high overhead charge. Section six simply stipulates the details of the manner in which the money shall be raised, bonds issued and taxes collected to retire the bonds. By the bond provision, it is felt that hospitals can be erected in all parts of the Commonwealth sufficient to provide the necessary hospital facilities without its being at any time an excessive tax burden upon the citizens of any community.

Section seven provides for the permanent upkeep of the hospitals when once constructed.

Section eight provides the right to take land by eminent domain for the purposes of carrying out the provisions of this act.

Section nine makes the County Commissioners ex-officio trustees of any hospitals erected under the provisions of the act and gives them the usual authority of trustees of such institutions.

Section ten states the manner in which patients shall be admitted and supported in these institutions, which is similar to that in which patients are admitted to existing state and city institutions. In other words, the charges are to be based on the actual cost of their care and treatment, exclusive of the charges pertaining to the construction and permanent up-keep of the institutions for which provision is earlier made in section six. This section also extends the state subsidy of five dollars per week to hospitals erected under this bill in the same manner in which subsidy is now given to city and private institutions.

Section eleven provides that the State Department of Health shall approve the plans of new hospitals or additions, and makes provision for an unpaid board of visitors.

Section twelve makes a special provision for hospital facilities in those parts of the county of Suffolk, outside of the city of Boston. This section is necessary because of the fact that in the county of Suffolk there are no County Commissioners.

Section thirteen is a repeal section.

Such are the salient features of the proposed legislation for more tuberculosis hospitals in this State.

THE RELATION OF THE ANTI-TUBERCULOSIS SOCIETY TO THE LOCAL BOARD OF HEALTH.

BY JOHN W. TAPPER, LYNN, MASS.,

Chairman, Board of Health.

As a factor in the conservation of human life, the Anti-Tuberculosis Society can, and should, be one of the most valuable units of the public health machinery. Its field of action is not only extensive but offers immense possibilities as well. Its value and usefulness, however, depend wholly upon wise counsel and the adoption by the society of a definite, fixed policy, so that, as a result of its efforts, may be realized the maximum of benefit. Today, apparently, the one great weakness in the battle against tuberculosis is lack of coöperation among the available forces, because of which we are wasting a lot of valuable energy. I believe this weakness can be wholly eliminated, if frequent conferences are held between the several societies and the local boards of health, upon whom rests, as the name indicates, the burden of conserving the public health. These boards are required to direct their forces not only against tuberculosis, but against many other diseases that may threaten human life. For this very reason, boards of health are given greater power than is given to any other unit of the civic government. The Legislature, however, has very wisely surrounded these boards with certain laws designed to govern their actions, and no matter what the particular type of case may be, the health board must base its actions upon the law in the case, and what is revealed by its investigations. In fact, in all of its efforts and its actions, it is surrounded by law; of which, the law of settlements plays an important part, and the final disposition of the case must depend upon what its investigations reveal. In this phase of its work, it may be materially aided through the assistance of any society whose object is the elimination of some one particular health danger. In this respect, it is true, that today it is possible for almost every health department to avail itself of the assistance of one of a number of different organizations who are seeking to aid the health and comfort of their community, through the reduction of some particular type of disease, in which they have become interested. Of these several organizations that might be mentioned, and which are doing good work, are those interested in Child Welfare, Community Betterment, The Housing Problem, Baby Clinics, Modified Milk Stations, and numerous others; all very worthy and deserving of encouragement. But none of these can be of real value, unless they work in complete harmony with the local board of health. Unfortunately, some do not work with us as they should. This may not be wholly their fault, but, regardless of whose fault it may be, it should not exist. It can be avoided if we but foster the get-together spirit. I wish you to appreciate the real spirit of this criticism, for I am only trying to point out the many difficulties that boards of health must overcome because the several different organizations at times act independently; that is, oftentimes a board of health is hampered in its work by the actions of an organization which, in its eagerness to do good, defeats the very object of its efforts, simply because it fails to appreciate the value of coöperative work. In other words, it fails because it attempts to solve a problem, the burden of whose solution the State has placed squarely upon the shoulders of the local board of health, and at this very point, we may well ask this question: The State having so placed the burden, can the local board of health, alone, solve the Public Health Problem? I am firmly convinced that no board, no matter how well equipped, can solve this problem without the assistance, backing, and coöperation of the public, and next to the public's support, one of a department's greatest assets is the support of a well organized anti-society, and of these, the greatest opportunity for world-wide good is offered the Anti-Tuberculosis Society. It has been well said, that a community may have as much health as it is willing to pay for. Good health is purchasable, but those agencies intrusted with making the purchase should be chosen wisely and given the coöperation of every individual and organization, that we may in return receive every possible benefit that coöperative efficiency can produce. And here, we may well consider just what part an Anti-Tuberculosis Society may play, and what may be its ideal relation to a local board of health. Quoting from a pamphlet issued in January last by your organization, you say, "Because the State is requiring the construction of tuberculosis hospitals and the maintenance of tuberculosis dispensaries, the impression has gone abroad that there is no further need of an Anti-Tuberculosis Society and committees interested." In the suppression of tuberculosis, if such an impression is really abroad, I am, personally, not in accord with it. Based upon an actual experience covering a period of several years in health work, I am convinced that the need of an Anti-Tuberculosis Society exists today to a greater extent than ever. To discontinue the effective work of the Massachusetts Anti-Tuberculosis League, with its kindred organizations, would, indeed, be not only a step backward, but a most serious blow to the cause. I believe, if it were possible for me to get an expression from the thousands of unfortunate victims throughout this State, their unanimous verdict would be: Tell the League that we need them now as we never needed them before; tell them that we have faith in them, and believe that they should continue to be as a beacon light toward which we may steer our frail craft of hope, confident that, under their watchful care and guidance, our emancipation from this awful affliction will be the more quickly realized. This, I firmly believe, would be the message they would tell me to deliver to you today and, in

giving you this message, I feel that the responsibility rests upon me to urge you to study well the means by which you can best serve them. Let me urge the great value of efficient coöperation with the local boards of health. That is your sphere, and that the only road to your ultimate success. From your past experiences you must have a store of knowledge that should prove immensely valuable to you as a guide.

I believe that your work is just beginning and the first problem that you have to solve in this great crusade is the complete development of a modern anti-tuberculosis organization; that you may not only hold the ground already won, but that you may be enabled to push on to a complete victory. Such an organization should include a working unit in every community, thoroughly organized in every detail. I am quite confident of the good results that would accrue, if these city and town societies were made a working unit of a State league, made up of representatives from the local anti-societies. Frequent conferences should be held with the local board of health in order that duplication of effort, and consequent embarrassing situations, may be avoided. It is not my intention in any way to attempt to map out in detail any definite line of action, because I am too well aware of the widely different conditions that obtain in the different communities. I fully realize that in the community maintaining an active health department the real function of an Anti-Tuberculosis Society is more of an educational one. It should, in a great measure, confine its efforts to the dissemination of information, covering not only the care of predisposed tubercular persons, but including in its activities a complete study of the entire social problem as well. This study may well include the housing and lodging house problems; the employment of arrested cases and every other phase of their social welfare. This work you may well do, but it should be carried on in complete harmony and coöperation with the local boards of health. You should never attempt to handle an actual case of tuberculosis without first obtaining a complete understanding with the health department, that you may keep fully informed of just what that department may have done in the particular case in which you have become interested. I want to emphasize this point, but to illustrate more fully, let me cite several cases, that I may show you what may rightly be termed ill-advised attempts to handle an actual tuberculosis patient, and its resultant bad effect.

CASE A. This patient was sent by a private society to a local hospital. Diagnosis of tubercular ulcer made. Patient was operated upon. After several weeks' stay in the local hospital, arrangements were made and patient sent to a convalescent charitable home. Upon admission and examination of the patient, the society interested was notified to remove the patient at once as she was suffering from three or four discharging tubercular ulcers on leg, and otherwise not a fit case for this home. The board of health was then notified and asked to relieve the society. This was done and the patient sent to the local tuberculosis sanatorium, where she should have gone in the first place, and the consequent exposure of others would have been avoided.

CASE B. In this case, the board of health was notified and plans made for the removal and care of patient, because home conditions were unsatisfactory, and sufficient means to handle case at home were lacking. Consent of patient and mother of patient obtained for removal to sanatorium. After all arrangements for the care and removal of patient had been completed, patient was visited by worker from private society and advised to move from house where they were to another location, and to remain at home. Patient, thinking financial help would come from private society, accepted advice, and disregarded all previous arrangements made by the board of health. After patient had gone to the expense of moving, very little assistance was given by the society who had interfered. This patient lived eleven months. Was a bed case the entire time. After waiting for expected help from this society, and not receiving it, patient and mother realized their mistake, and asked our social worker to provide milk and other necessities. These were provided as patient's condition at this point made removal seem unwise.

CASE C. Board of health was notified, visited patient, found home conditions very bad. Patient was advised to go to our local tuberculosis hospital to await admission to Rutland Sanatorium. Private society advised sending patient to New Hampshire, they paying board for a given number of weeks. Our social worker, knowing the patient's condition, advised against this plan; fearing patient would exercise too much when rest and medical supervision were needed. Notwithstanding this advice, patient went to New Hampshire, remaining there about three months, returning home unimproved. Visited our dispensary and requested that application be made for admission to the Rutland Sanatorium. This admission was refused because being too far advanced. After many weeks of unsatisfactory home treatment patient entered our local tuberculosis hospital, death occurring a few months later.

CASE D. This patient, a man having a wife and four children, was examined at our local dispensary, and advised to go to a local tuberculosis hospital, pending admission to Rutland Sanatorium. Patient wished to take home treatment, promising to report to dispensary, and if he did not improve, to go to the sanatorium. Home conditions were very bad, but a piazza was put in condition for out-door sleeping purposes. Not improving, he entered the local hospital; his family were kept from want by an income provided by a mutual benefit association, and other T. B. funds. Efforts were made by our department, and an out-door position found for him as soon as he was able to leave the hospital. Just previous to his discharge, however, his home was visited by outside worker, who suggested that the family apply to the overseers of the poor for more help. This was done to relieve the society of further financial obligations. We discovered this in time to prevent the family becoming a city charge. The patient has been discharged and is now work-

ing to support his family without the aid of the Poor Department.

You will note in every instance, no attempt was made to work with our local board until the case became a burden and they wanted to drop it.

We might cite a number of other cases to show how an active health department may be handicapped by workers seeking to do good, but who oftentimes are only undoing work which may have taken the health department several weeks to accomplish. Our department early recognized the fact, that every case presents some peculiar phase which requires individual treatment of its own. In fact, all cases differ, thus making it impossible to adopt any hard and fast rule to cover all cases alike. It also frequently happens that a physician, for reasons best known to himself, and in the interest of his patient, deems it wise not to make known to his patient just what his or her actual condition might be. Our board, appreciating this situation, has suggested to all local physicians, that in the event of their having a patient from whom they wish temporarily to withhold the true diagnosis of their case, our department, if requested, would defer its action until such time as the physician might feel that we could with safety take up the case. In almost every instance we find that this rule works decidedly in the interest of the patient and for the better understanding between the physicians and the board of health. The public is safeguarded and the comfort and happiness of the patient are not disturbed. It also encourages that get-together spirit, so essential if success in this fight is to be attained.

In conclusion, may I express it as my firm belief that, having lived to see the dawn of a new knowledge, to have seen that knowledge dispel ignorance and apathy, through which tuberculosis levied its pitiless toll on human life, unheeded and unhampered; having lived to see a substantial decrease in the death rate from this dread disease, we may yet live to see the open gateway to complete success, with all that it means to science, philanthropy, and the brotherhood of man. But you and I can never hope to enter that gateway alone; we must go together.

The Visiting Tuberculosis Nurse.

By Mary Van Zile, R.N., Beverly.

In last year's report of the Massachusetts Anti-Tuberculosis League there appeared a paper by Miss Amy F. Acton on "Tuberculosis Work in this State." With the point of view of the Chief Inspector of Incorporated Charities of the State Board of Charities, Miss Acton comes to the conclusion that the chief function of an anti-tuberculosis society is to educate. She says, "As I conceive it, the work of the private society is to gather information touching cause and prevention of tuberculosis, by studies and other means; to disseminate it as widely as possible; and to interest the public to support necessary legislation." This is to be done by "popular lectures, moving picture films, exhibits in schools, shop windows, etc., leaflets in different languages, popular articles in the press, competitive essays by school children, and all other educational methods which human ingenuity can devise. Ideas presented thus reach a vast number of persons at a stage where suggestions for avoiding this disease may be helpful and before control becomes necessary."

If this is to be done by Anti-Tuberculosis societies, the Public Health Nurse, being the home teacher, must, as the agent of the Society, work on that line. For "it is not what scientists know but what people apply that marks our progress." It may interest you, therefore, to see how a practical nurse had come to this same conclusion, through quite different ramifications of experience.

In the beginning of tuberculosis nursing one is somewhat appalled by the complexity of the problem; sickness of such duration as usually to bring poverty and discouragement, and gradual lowering of the standard of living. One may know tuberculosis from A to Z theoretically and technically, and even the best practice in handling these cases socially, yet the first visit in an afflicted home may seem staggering in its need. To find the wage-earning father needing sanatorium care; the older children with defective eyes and throats and faulty posture, all tending toward infection; to see the baby sickly and miserable despite, perhaps, the best efforts of an ignorant mother. All this makes the nurse feel the necessity to coördinate the organized agencies to help this family. Where shall she begin and where will the process end?

Care of the Tuberculous.

First, the public must be educated to provide sufficient and efficient care for its consumptives, enough hospitals so that when the man has consented, after much persuasion, to take sanatorium treatment he will neither die nor become discouraged before being admitted. Also the nurse feels the need of provision for the uncontrollable, careless consumptive, and of the law to enforce his removal if he will not take necessary precautions against infecting his children. Here especially she must have the support of Anti-Tuberculosis Societies in introducing and enforcing good laws. The members of these societies are usually the influential people of the community who, by understanding the need and instructing their legislators, can do much to furnish a background for more efficient work. Dr. Linsley R. Williams of the State Department of Health of New York, speaking of the segregation law in that State said, "Though few cases

have forcibly been sent to hospitals we count ourselves extremely fortunate in having such a law behind our work."

Inspection and Regulation of Working Places.

In her search for the cause of infection with tuberculosis the nurse hears frequently of "the man working beside me who coughed and expectorated constantly"—pointing to the need of more unprejudiced inspection of working places. These older children when sent to work should not carry infection into the home. The Anti-Tuberculosis Society may take its part in regulating the construction of factories and the conditions of work, the wages and hours of employment and in instituting health insurance.

Provision of Prescribed Treatment for Children.

Medical inspection of schools is required by law in Massachusetts, but the child in a family will not be benefited *merely* by a report from school that his eyesight and teeth are defective, that his adenoids should be removed. *The treatment must be given.* If it is found that the parents have more expenses than can be covered by their wages the city should provide means of making the child an efficient citizen. According to insurance calculations a child between 10 and 20 years is worth $2,000 to the State, and a wage-earner between 20 and 30 is worth $4,000. Therefore the city can well afford to spend $10 a year on the health of each child to save his life and promote his wage-earning efficiency. To be well and healthy the child must have physical development and recreation, and to be happy and healthy-minded he must have culture.

Let the Anti-Tuberculosis Societies encourage the support of gymnasiums and playgrounds, children's libraries and picture galleries. Let them censor, to some extent, the motion picture shows, to see that they are educative and inspiring rather than sensational. Let nature-study be provided to go hand in hand with the school teaching of physiology and hygiene, thus guarding against the mistakes of adolescence.

Instruction of the Home Makers.

We note in our family a sickly baby and others, under-nourished, due probably to low wages and the decrease of income with sickness, but partly due also to the waste of material because of the ignorance of the home maker.

Instruction of Mothers should begin with girls of school age and be supplemented later by instruction in care of babies and children. The nurse and visiting housekeeper are the most practical teachers in this line. To demonstrate this need some societies provide visiting housekeepers to begin in the homes of tuberculous patients with instruction in the buying and preparation of food. Later city authorities may become convinced of the economy of such teaching and extend the service.

Regulation of Building and Renovation of Houses.

A very great need in tuberculosis work and in health work, as the nurse sees it, is the building of better houses and the right to condemn and destroy unsuitable tenements. Many a workman spends a quarter of his income on shelter for his family and gets therefrom disease and immorality and unhappiness. *Pure air, pure food* and *safe water,* with facilities for disposal of waste, are only a fair allowance for all taxpayers. Here the more intelligent citizens can make valuable reforms.

Co-operation of all Public and Private Agencies.

The family problem requires much planning and an appeal to many agencies, public and private. The duty of the nurse and her society is—not to give this aid, but to procure it from the organizations already formed for the relief of just such conditions. The Board of Health is empowered to help in sickness, the Poor Department in poverty, and private relief agencies and clubs have for generations given a helping hand when appealed to. Why, because we are dealing with tuberculosis, need the Anti-Tuberculosis Society be added to the list of relief-giving agencies? In dispensary work the giving of medicines or relief diverts the attention of the patient from the importance of the physician's advice and frequently leads to needless pauperization.

Much more profitable and constructive is the education which may prevent sickness and so strike at the root of the difficulty.

Co-ordination of the Public Health Nursing of the Community.

The great waste in the nursing field is in duplication of effort. When the school nurse and the district nurse and the tuberculosis nurse are found to be visiting this family for different purposes and at different times, they will give conflicting advice, and must keep unnecessary records. The result is confusion of mind for the family, and the loss of the personal influence of any one nurse.

So valuable an asset in public health nursing is the fellow-feeling between nurse and patient, that any amount of technic and system may well be sacrificed for this human touch. When the time comes to persuade this man to go to the sanatorium, it will be the nurse who has helped in other emergencies,—when the babies were born, when the children were sent to school or to work,—who will be able to influence the father to save his health for his family.

It is most desirable to work toward the organization of all public health nursing under one supervisor, as is being done in New York, Cleveland, Boston, Fall River, Dayton (Ohio) and St. Louis. Especially in organizing new work in smaller communities it is wise to co-ordinate the nursing; better still to plan a health centre for

the care of all indigent sick. Here can be centralized all public care, including that of the city physician, the dispensary and the school physician, making use also of the power of boards of health and the facilities of private agencies.

But above all the system and the executive efficiency, the visiting nurse must herself have the touch feeling with her patient. She must see his predicament as he sees it and adjust her plan to his individual need, remembering always that though she may procure for him and his family all the advice of the medical authorities and all the goods of her co-operating agencies, without charity it will profit him nothing. He will become embittered and disheartened unless by her courage and helpful spirit she can show him the way out, the purpose and object of all his struggle for health.

TUBERCULOSIS IN RURAL COMMUNITIES.

BY VANDERPOEL ADRIANCE, M.D., WILLIAMSTOWN, MASS.

THE mortality rate of New York City is now lower than that of the rural part of New York state. A few years ago this would have seemed quite impossible, for the opposite relationship prevailed. The science of sanitation has apparently accomplished a reversal of what ordinarily prevails. This can be explained only by assuming that the inhabitants of the countryside are not receiving the same good care that protects the inhabitants of our greatest city from preventative disease.

In matters pertaining to the disease we are discussing today, namely, tuberculosis, the rural population of New York as well as Massachusetts may well consider that they do not have as much done for them as the members of the cities of their respective states. The problems of tuberculosis have been faced in the cities of our Commonwealth and when the cities have been tardy in providing sanitaria and dispensaries the State Board of Health has called attention to delinquencies. The state has overseen, encouraged and even forced some control of the tuberculosis problems in cities over 10,000. This touches two and one-half million lives, but more than three quarters of a million living in towns of less population, and particularly in the farming districts of our countryside, may well consider that they have been neglected. Unfortunately although tuberculosis reaps a large harvest in their midst these people are apt to think the factor too small to be seriously considered. They will be found not only indifferent but even hostile to any agitation or legislation which rests upon the acknowledgment that the disease is prevalent among them. Even the local boards of health, which should be foremost in public health work, take but little interest in the problem and view with indifference the customary laxness of the medical profession in diagnosing and reporting cases of the disease.

Under such conditions the first step in educating is to convince the people that tuberculosis exists in their particular community.

When the local association was formed with which I had some acquaintance, a supposedly well equipped physician said to me, "What is the use?—there are no consumptives in this community." When I showed him that nine deaths from the disease stood on the town records of that year, he could only take refuge in the assertion that the diagnoses were incorrect. Let it be admitted that sometimes even in the medical profession we find bliss and ignorance combined.

To undertake the work in rural communities it seems wise to begin with a thorough understanding of the problem. Nothing can help so much as to empower the State Board of Health to make an accurate survey of rural tubercular conditions. This cannot be done without the appointment of additional helpers. It seems wise to urge the necessity of the appointment of a nurse in each health district who shall work in harmony with the health officer. With such an increase in his staff, it is thought that our competent Commissioner, Dr. McLaughlin, will be able to collect the facts which will lead to a proper understanding of the problem and eventually permit of the control not only of tuberculosis but of other communicable diseases. It seems to be our duty so to influence legislation that our commissioner will be able to carry out this prospective survey.

Let the anti-tuberculosis workers of the state advocate wise legislation, but let them also encourage and take active part in the formation of anti-tuberculosis associations in our smaller communities. That there is plenty of opportunity for this work appears from the statement, based on credible information, that in towns of less than 10,000 in our Commonwealth, there is only one active anti-tuberculosis association. Associations which take up their duties in smaller communities can do very effective work by cooperation with all the allied agencies so that in that Utopian day when the State Department of Health assumes complete control of the work, they will find preparation has made their task easier.

A most efficient method must be by the establishment of these branch organizations which coöperate with the National and Massachusetts Anti-Tuberculosis Associations. The day of the local anti-tuberculosis association has not passed. Its duties are just beginning in these rural communities and we can but hope that many modest but active associations will soon come into existence, doing their work as nobly and as effectually as those of the cities.

The review of the annual report of a well organized anti-tuberculosis association in which

attention is called to the prominent citizens on the board, the expert physicians who advise the corps of trained nurses, the well equipped hospitals, sanitaria and dispensaries, is depressing for the would-be worker of the rural community. It is easy to succumb to discouragement and quickly acknowledge that with the scanty talent at hand nothing can be accomplished.

In the fight against the white plague there is no room for such pessimism. No one can read Trudeau's Autobiography without being impressed with the optimism which he preached and which mastered him, and no one can claim such isolation that nothing can be accomplished in his hamlet. May many a neglected town develop workers with a Trudeau-like spirit! Although their names may never be acclaimed like his, their opportunities in the service of mankind promise much more than he ever dreamt the primitive lumbering camp of Saranac held for him.

The consumptives of a rural community will vary according to the population but they will seldom be numerous; and the smaller the town, the fewer will be the patients accepting charity. Sociological questions will be such as to make few exacting demands upon the officers, and many workers will not be needed; but a few workers can accomplish much. An interested physician is indispensable and, if the community is large enough, a trained nurse may be well employed in the field. In the larger towns all of the nurse's time may be needed, but it is more likely that it will be found wise to employ only part of a nurse's time in the smaller towns. In this case a convenient arrangement can be made with the local charity organizations, the nurses' associations, the Foresters, the churches, or other interested societies.

The object of the newborn organization should be to maintain a central organization for keeping information about tubercular patients,—to keep in touch with these patients, referring them to sanitaria if necessary and to keep acquainted with patients who are sent to the community from sanitaria.

The other duties, which are axiomatic, will be omitted before this audience, so well educated in tuberculosis work.

As the years go by no earnest worker in rural communities can fail to be convinced that he has a large educational opportunity, and as his experience increases he will find that where the field of social service is limited, the main function of his organization must be educational. There are plenty of opportunities to give talks before granges, churches, Foresters, etc. It is disappointing to find the school children are not given the privilege of instruction in tuberculosis, although the laws of the Commonwealth particularly prescribe it. It appears to be the duty of the local anti-tuberculosis association to see that instruction is given in the nature and prevention of tuberculosis. One of the methods easily adopted is by means of the set of lantern slides which are supplied by the National Association and are accompanied by a regular printed lecture which can be amplified if desired. The talk of about twenty minutes and the pictures never fail to make an impression and can be used for children in the higher grades, whereas simpler exhibits can be easily secured to vary the instruction. When talks are given the opportunity should never be neglected to give printed pamphlets to the children, who eagerly accept them and carry the message to the home circle. The superintendent of schools will gladly give the speaker the opportunity to talk, for it relieves the teachers of instructing on a subject upon which they feel ill prepared.

Moving pictures have been used with great success in some communities. It takes little effort to arrange for a complete program of films furnished by the National Association. By cooperation with the local movie manager tickets for all the children in the upper grades can be secured at a moderate price, and while enjoying a treat, the school children obtain lasting impressions.

Our main hope in this campaign is in the children of today who will be the workers of the next generation. May they be properly acquainted with the great facts which our generation missed! It is our duty to see that heredity as a factor is entirely erased from the blackboard and that the individual unit will not endeavor to blame his prenatal condition for his unhealthy state. It is our assurance that education of the school children of today will do more to cut down the number of consumptives of twenty years hence than any other factor. Let the tuberculosis worker of the rural community pound in these facts if he neglects all others and he will have accomplished much.

We must spread broadcast, by whatever means we have, the fact that "tuberculosis is a song begun in the cradle of the infant." The child is the beginning and the solution of the anti-tuberculosis problem. We may be too late to save the diseased of the present generation, but if the children of today are taught what we wish them to know, the devoted fathers and loving mothers of another generation will see that their offspring is protected even if their lives have paid the price of ignorance.

With the children, education appeals to me as the most important agent at our command, for they are easily reached in our public schools. I would suggest that the State Board of Health take upon itself the duty of seeing that our present laws in relation to instructing public school children are enforced.

There is yet another bearing of the tuberculosis problem which is of particular concern to the children, whether of rural communities or cities, and that is the prevalence of bovine tuberculosis. There are two types of germs of tuberculosis,—the human and the bovine tubercle bacillus. The greater number of cases result from exposure to the human variety. Much has been

said about the characteristics of the disease it causes, until now a few of the laity appreciate some of the essential facts which have been driven home by such interested people as present themselves here today.

There is another type of bacillus, however, namely, the bovine type. It is well known to bacteriologists and specialists upon the subject of tuberculosis, but this germ provokes little interest from the majority of the medical profession and the laity.

The bovine type of germ is purveyed to inhabitants of city and town alike by the farmers of our rural communities. If the inhabitants of Massachusetts are not well instructed in regard to the old fashioned type of pulmonary consumption, they certainly need instruction in regard to the tuberculosis which is caused by the bovine type of bacillus. The evidence against the bovine bacillus has accumulated at a rapid pace and it is time some steps were taken to guard against it. It infects adults and children, but as the germ is carried to us chiefly in the milk, it is not strange that the milk consumers, and particularly the children, are affected. The children under five years are the chief sufferers, be they residents of city or country. This is a menace to the children of the city as well as the country. Any rural anti-tuberculosis worker must hail the day when a regular campaign of education is begun in regard to the dangers of milk from tubercular cows. The entire state is sinned against and the rural communities are the sinners in producing the infected milk.

The results of individual investigators, as well as the British Royal Commission on tuberculosis and the German Commission, show that there is a considerable percentage of bone, joint, abdominal and lymph gland tuberculosis which is bovine in origin. By far the most convincing work on this subject comes from Park and Krumwiede of the Research Laboratory of the New York City Board of Health. They have themselves studied 478 cases and, after adding the cases observed by others, their tables show altogether 1,511 tuberculosis cases. After tabulating and reviewing the subject they conclude 12.5% of fatal cases in children under five years were due to bovine infections, while in the total series about one quarter (26%) of all the cases under five years were bovine infections.

This paper is not strictly scientific and the writer must be excused if he fails carefully to quote all the investigators who have become convinced of the danger from the milk; but it seems wise to mention a few suggestive references.

Orth says 10% of all tuberculosis in children is due to bovine infection. An English observer says not less than 25% of the tuberculous children under five years of age suffer from an infection of bovine origin. It is possible to quote many authorities for the accepted fact that a great deal of tuberculosis in children is due to milk from infected cows. A. Stanley Griffith, in a study of tubercular cervical glands, showed that the proportion of bovine infections reached as high as 90% in the children that he examined under five years of age.

It is not wise to trespass upon the ground of the veterinarian, but it cannot be doubted that there is a great deal of tuberculosis in the dairy cows of the United States. Chief Melvin, of the Federal Bureau of Animal Industry, and Professor Moore, of Cornell, concur in the opinion that not less than 10% are affected.

In our own state, between 1893 and 1908, 10,688 were found to be tuberculous by the tuberculin test, as well as at post-mortem examination.

A. P. Mitchell of Edinburgh, in a study of the frequency of bovine tuberculosis in cervical adenitis, found out of seventy-two cases sixty-five yielded the bovine variety and only seven the human type. He was not surprised, on making an examination of 406 samples of milk collected from as many shops of his Scotch capital, that 20% of them contained the germ of bovine tuberculosis.

The Department of Health of New York City examined 78 samples of milk, 11½% of which showed virulent tubercle bacilli.

Unselected raw milk, taken at random from various cities, show virulent bovine tubercle bacilli in from 10 to 20% of the samples.

There appear to be two ways to do away with the danger of infected milk. First, do away with all infected cows. There is no time to go into details in discussing this impossible procedure. Science and economy would not favor such wholesale slaughter and it is not for us to urge such foolhardy legislation upon the state.

A more practical method is offered in the pasteurization of all milk—a measure which our State Board of Health heartily favors. This process does away with the danger of other infections than tuberculosis and, while being a good hygienic measure, is the most economical and surest way of removing all danger of the transmission of tuberculosis through milk.

SUMMARY.

1. Rural communities are very ignorant of the prevalence of tuberculosis.
2. Rural communities have been neglected in the anti-tuberculosis campaign.
3. The formation of anti-tuberculosis associations should be encouraged in such communities.
4. The State Board of Health should be encouraged to make a thorough survey of the prevalence of the disease.
5. The State Board of Health should enforce the law which demands instruction about tuberculosis in the public schools.
6. Instruction is needed in regard to bovine tuberculosis.
7. Bovine tuberculosis is commonly conveyed through the milk and is a menace, particularly to children under five years of age.
8. There should be a state law compelling the pasteurization of all milk.

Some Problems of the Trustees of Massachusetts Hospitals for Consumptives.

By Arthur K. Stone, M.D., Boston.

A great ray of sunlight has come to us who have been combating the almost insuperable difficulties surrounding the tuberculosis questions, in the report from Australia of a fall in the death rate to 8 per 1,000 and of the practical disappearance of the tuberculosis question in Victoria.

Even should this latter report be premature, nevertheless, the fact that it can be made by a man of the standing of Dr. Heiser shows that efforts which have been put forward and pushed in spite of failure, mistakes and hostile criticism are along correct lines, for the Victorian victory is but the triumph of segregation and isolation of the patients with this disease.

This gives us here in Massachusetts courage to go ahead and press the laws which we have on our statute books, and should encourage every worker in the individual societies, which make up the League, to work with redoubled energy—not flagging zeal—to spread the health education from the so-called intelligent classes to the most needy and ignorant persons in our midst, always remembering that the well-to-do persons are often the most ignorant.

First of all, let us do what we can to help out the laws which have been proposed to provide hospital accommodations for all who wish and need the protection of the hospital for themselves and for the good of their families.

Let us show to our friends in the legislature the needs in every town, so that we may have the necessary places for segregation of the active tuberculosis patient. Then when that has been accomplished, the dispensaries will begin to pick up the early and suspicious cases and transfer them at once to Rutland and the other sanatoria where the chance of arresting the disease is greatest.

The plans for the general segregation and treatment are complete. They have not as yet been carried to the fulfillment and cannot be for several years to come, under the most speedy conditions. But the fulfillment of the plans can be but a matter of time. Brookline has built a charming little hospital. The Barnstable County Commissioners have been studying their problem. Lowell has selected its site and—this settled—must soon take itself out of the group of laggards. New Bedford will soon increase its facilities—the energetic Mr. Geoghegan assures us—and put itself still further in the lead of all the Massachusetts cities. Malden for the moment is held up by a new mayor. Fall River will build a hospital commensurate to its needs and not be content with one of about one-third the proper size. All this is of the greatest encouragement and gives promise of greater advances in the future.

The move made by the State Board of Charity to raise its payments for state cases from $7 per week to a sum nearer to the actual cost of maintenance in the various local hospitals will do much to diminish the discontent which one finds cropping out regarding so-called state cases.

There is earnest work in all directions being done by the Department of Health and there is the fullest coöperation of that Department and the Trustees of Hospitals for Consumptives, this coöperation manifesting itself in the constant courtesies between the Inspectors of Health and the physicians in the districts and our after-care worker, who does much to help them in many outlying districts; and on the side of the towns and cities, the dispensary nurses are helping and taking the burden from our after-care worker in many communities; and doubtless the time will not be far distant when other cities and towns will be able to report all that she wants to know by the mere writing of a letter.

But although much in the way of coöperation has been accomplished, there are still communities where the idea of getting in step and making a mighty effort to get the upper hand of the tuberculosis problem does not seem to have penetrated. There are boards of health who seem to prefer to see how little they can do, who will not acknowledge that they have any tuberculosis to deal with; who only know those few cases reported by physicians and who make no attempt to have all cases reported; who point with pride to an unsuccessful clinic and who seem to gloat if they can find an advanced case that they can force upon the state sanatoria. A few boards have all of these uncoöperative tendencies—and many more develop some one or two of them. The point of view of the state policy is misunderstood and opposed. That there are reasons for such misunderstandings, I can well appreciate, but I know that every one in the Hospital Department and in the Department of Health and in the Board of Charity would be willing and glad to talk to any disgruntled and perplexed individual to try to smooth out these difficulties; and with a little more cordial getting together many of the misunderstandings can be done away with. So when you, as workers in the cause, hear of misunderstandings, urge a personal interview and see if the matter cannot be straightened out.

A perpetual problem for the Trustees of the Hospitals for Consumptives is the difficulty of administration. In the four sanatoria are gathered together a thousand patients—Gentile and Jew, white and colored, and native and foreign born, even to the dwellers of China and Mesopotamia, united in the common bond that they are the victims of the bacilli of tuberculosis, and are sick.

It is not to be wondered at, that many of the patients are homesick, often *unreasonable, suspicious* and *unhappy*. Their manner of life has been interrupted abruptly by sickness and they

are expected to conform to institution rules and regulations which should be strict so as to secure for the patient the greatest chance for recovery and return to economic usefulness in the shortest possible time.

The response of the patients to hospital life is very different. The great majority say that they wish to get well and they think they mean it, but in spite of this many of them drift into the indifferent class, apparently quite content to eat and sleep, and beyond that to do little to help themselves or their neighbors to improve. This group of seemingly indifferent people are a great drag on the medical staff and upon those patients who are zealously trying to return to health and work. The boundary line in this group is very indistinct and many would be surprised to be considered therein. Some are only there occasionally, sliding down in a fit of the blues, while at the other end, a few drop down from the indifferent group into the undesirable class; that is, the group to whom all rules and regulations are anathema and their whole attitude is one of opposition to authority.

We have to take the men and women as they come, with various undesirable habits fastened upon them, and they do not leave these at the doors of the institutions. Some of these habits have been a factor in their undoing and falling a victim to the bacilli of tuberculosis—but by them this fact is usually not recognized.

With this heterogeneous mass of patients the institutions have to deal. The work is for a great part educational, trying to show why the rules and the regulations are made and why their enforcement is necessary. The coöperation that is secured between the staff and the patient has to be founded on intelligence and not on discipline, and yet there must be a line where forbearance and patience cease to be virtues and discipline must be maintained. For the intractable group of patients, of whom there are many in the community, and the Boards of Health are in touch with many more of them, because only too often they will not enter voluntarily any institution—there must come some place where these persons who are a menace to the community can be segregated; where they will be under control as menaces to the public health and not allowed to endanger the wellbeing of others. This to my mind must follow quickly on the establishment of all the necessary local hospitals that are now planned. It is, however, to be hoped that with the spread of education and temperance reform, and other uplift work, that this group may grow so small as to become a negligible factor in the tuberculosis campaign.

It is to my mind a debatable question whether the state should build a new institution to which should be sent the intractable and indifferent patients and those state cases which do not belong in the Tewksbury group and for whom there is no provision in the local hospitals, or whether one of our present institutions can be enlarged to advantage so as to take care of these cases and to use the other three for the really early and curable cases.

Again, what is to be the future of the work for children? The start at Westfield is most encouraging. Is it to be developed then to the exclusion of adults and will this very growth among the children make a new state institution necessary?

These are perplexing questions which I find it difficult to answer, practically impossible of answer until the new hospitals are in full working order.

In a recent bulletin of the New York Department of Health the statement is made that the nurses of the department were finding five cases of tuberculosis for every death reported. The Industrial Accident Board are having cases of tuberculosis put up to them as industrial accidents and there are judicial decisions which make it possible that such claims may be allowed. If that is so the employers of labor will have to protect themselves by physical examination of their employees, and there will be a demand for sanatorium treatment of many very early and suspicious cases such as never before has arisen. Are we as yet, in our plans, even prepared to meet this probable demand for early sanatoria treatment?

In New York City there has been such pressure for beds for active cases that we are told that patients are discharged who have a certain number of negative sputum tests. This is an entire abandonment of all attempt of cure for purposes of segregation. The emphasis is put on the community at the expense of the individual. This extreme position does not seem to me justified; persons with tuberculosis should be segregated, it is true, but, if possible, they should be cured and returned to the community, able to be useful citizens once more. Arrest of the disease and return to economic usefulness should be the purpose of the state in its work as well as mere segregation.

Nevertheless, there are a number of patients who, after a period of progress, seem to come to a standstill, or the progress is very slow, indeed. Some, though this active progress is arrested, show that they can never become self-supporting, active citizens again. They can live—and live happily—under the protecting walls of an institution. Some of these persistently have bacilli and some never have bacilli or, at most, at rare intervals.

What shall be the attitude of the state to these persons? In the course of years, groups of this class of patients tend to collect at various institutions. What shall be done with them? To this group must be added the group of patients where, in spite of marked symptoms and signs in their lungs, there is nevertheless grave doubt whether the process is even that of real tuberculosis, but rather of so-called chronic bronchitis or bronchiectasis. These people are sick and suffering, but they are not,

so far as we know, dangerous to the public health. To what extent should the state make provision for their care?

A difficult therapeutic question is how—after the period of rest has passed, and the patient has returned to a normal temperature, and bacilli have disappeared from the sputum—shall he obtain the graduate work necessary to put him in the best possible condition to enable him to return home capable of being a productive citizen? Nowhere that I have been able to learn has this been accomplished in any manner that has been applicable for transplantation to the large number of patients who are in the state sanatoria.

Such are a few of the questions which must engross the person interested in the work of combating tuberculosis in the State of Massachusetts. Some of them cannot be solved in the near future and only time will show in which way our energies shall be directed.

For the present the most important thing for all workers in the tuberculosis crusade is to encourage coöperation between the state agencies, the Department of Health, and the Trustees of Hospitals for Consumptives, which are working in complete harmony, and the various local agencies, the local Boards of Health, the people who control the municipal funds—whether for the benefit of the individual case or for the construction of much needed hospitals, or the maintenance of the municipal dispensary with proper nursing force.

The Value of a Program of Work for Anti-Tuberculosis Societies.

By Mrs. William H. Lothrop, Newtonville, Mass.

In one of the papers the other day I noticed in one of those "how to keep well" essays the doctor, when trying to convince the citizens of the value of going out in a snowstorm, used three arguments. In the first place, it was good for the digestion; in the second place, good for the complexion; and, in the third place, all the first families did it. So that, trying to follow that rather simple line, I think first, when we consider the value of a program, we might consider the work that Dr. Strong did in Serbia. You know when Michelangelo was asked to criticise a drawing or painting, it is said his way, if the drawing were very bad, was to do it himself. Just for a moment let Dr. Strong do it for us.

As I understand it, with his knowledge and with his experience he formed his own tentative program, but that before he went to Serbia at all, he went to London and to Paris and arranged for the coöperation of the Allies in Serbia, before he even reached there. Then when he got to Serbia he adapted his program to the needs of Serbia as he saw it, and then again put his program before the people, whose coöperation already was secured, and together they went ahead. But from the first moment there was a program.

Turning now to another aspect of it, what would you think of a business man with a large business of his own who did not take account of stock at least once a year and map out what he was going to do? What would you think of an engineer who was going to bridge a flowing river, who did not make a plan? What would you think of a political party that did not have a program? It is true the political parties call their programs "platforms," because platforms are something you can step away from after election. These might parallel the "first families" in the keep-well essay. But seriously what should we think of a farmer who did not go over his farm and survey his land or see where his fences needed to be mended, at least once a year? Or the woman who did not consult a fashion book when spring comes? Or the automobilist who did not look at a motor catalogue, or a gardener who did not consult Farquhar's or Breck's or some other seed catalogue when the days begin to lengthen? All the active world has a program. Surely the germ world has a strong one. Why shouldn't we have one?

A program really is intelligence as opposed to chance; selection opposed to whim; recognition of a community's needs opposed to individual idiosynerasy; the rudder opposed to the thistledown, the antipodal point, whatever it may be, opposed to that immortal progeny called "Topsy, that just grows."

As a working hypothesis merely, let me assume that you are convinced, and with your permission I will leave the immediate subject and turn to something else. I happen to belong to an association that is interested in starting societies for charity organization throughout the United States. When we are asked to go into a community we do not take a ready-made program from the New York office, but we visit and study that community and make up a program applicable to it. If I were to suggest a detailed program for a tuberculosis association in a community, rural or otherwise, I should first get in touch with all the agencies there that were already dealing with tuberculous patients, and from their records and experience learn the needs in that community relating to the prevention, first, and then the care of tuberculous patients. I mean by agencies, the local board of health, the overseer of the poor, the visiting nurse association, the Associated Charities, the school nurse, and other local workers, and also Miss Billings, Dr. Stone, Dr. Hawes, Mr. Stone, Dr. McLaughlin, the State's agents who work in all communities, and find out what they think should be done.

In general, however, for all communities there is the minimum which the Commonwealth of

Massachusetts says shall be done. This minimum is in the statutes, the laws relating to tuberculosis. To create hearty opinion in favor of these laws is a fundamental part of any program. It may be the law relating to a hospital, county or otherwise; to a dispensary, or to examination of school children, or giving information about tuberculosis in the school. Are all four laws carried out? If not, why not? All that you have obtained in the way of facts from your study of individual families cared for by other agencies or your own, use to show the need of law enforcement. Always—"When in doubt, trumps." Education is the "trumps" of the tuberculosis campaign. Public opinion we must have. Use your facts to make people care and to make them work. It is interesting that in the morning program the boards of health gentlemen talk, so they are here; in the afternoon they are not on the program and I am afraid they are not here, Mr. Chairman. I am sorry, because we are going to talk a little about them and it is so much pleasanter to do it in their presence. One question that was emphasized this morning was the need of complete harmony between the tuberculosis association and the local board of health. I should think that complete harmony, absolute harmony, would be possible under two conditions: One where you have two progressive groups, each of a high standard of efficiency, having vision, with a common understanding of the problem and much respect for each other, going ahead without jealousy, without friction, with continuous coöperation, and discussing matters and together evolving action so that it is hard to tell who was really the initiator of this policy or that. The other instance of complete harmony would seem to be where you have two equally inactive bodies. Very often, however, you have one active body and the other inactive. The inactive body may be either the tuberculosis association or the board of health, but when the situation exists, ten to one, each thinks the other more than a little queer. Then there is lack of complete harmony, but it seems to me that a community in that situation is much better off than one where there is absolute harmony and united inaction. I am just as ardent an apostle of coöperation as the preceding gentlemen, but I am no believer in coöperation in inactivity. I think that a good solid, impersonal fight, with an awakened public to judge between us, is more effective for the prevention of tuberculosis than where the lion and the lamb are lying down together peacefully asleep.

To return to our program. What more shall it include? Added to the enforcement of the laws of the State, there is the open-air school program, of which mention has been made so often at your meetings. On the educational side there is the work referred to here this morning,—the work of getting the facts as they are, whether they come from our own streets, from New Zealand or Australia, before the public, whether in the form of a pamphlet, a leaflet or in moving picture. The gentleman from Haverhill said we do not all speak the same language. In addition to the use of the foreign press, we may be able to teach parents through the children as is now being tried in New York, where the school board has given hundreds of thousands of pamphlets, on how to reduce the cost of living through careful buying and good cooking.

One method of education where I think we have been singularly lax, is in not making a great deal more use than we have of our cured cases. We might all take a lesson from the temperance platform, where the man who has been reformed comes and talks to the people. We have plenty of patients who have been cured. In our chairman's address a year ago, he told of a teacher who had been cured and able to continue teaching for seventeen years. That teacher, who had tuberculosis, who has since been teaching for seventeen years, on your movie stage or on your speaking platform, could do more to make patients willing to go to a hospital and give the public an appreciation of what hospital care means, and prevent hysterical fear of arrested and cured cases, than any one of us here. Especially in educational work for different nationalities, a cured person of that nationality, even if he is not a "speechmaker," his presence at a meeting where his countrymen can see him cured and working again in their midst, is in itself an effective object lesson.

Again, what shall our program be? Some of you are conducting hospitals, some of you are maintaining dispensaries; most of you who are doing that work are doing it so well that it is a very difficult and captious thing for anyone to criticise. But remember that just so far as institutions have their dangers, those dangers apply to you. I mean by their "dangers" their very virtue, their very efficiency, their very seeming adequacy. Here you have a well-run institution, and that is a real achievement; what strength have you left for your work outside the institution? You exist first as an association to prevent tuberculosis.

It was stated this morning that the State has called upon your board of health actually to do those things; the Commonwealth has legislated that your board of health shall maintain your dispensary and shall conduct your hospital. You do it, some of you say, because you cannot trust your board of health. It seems to me that the work that the board of health does in tuberculosis is a barometer of its general work. I understand that a barometer does not mean that it always rains when it says it will, that there are exceptions. Therefore I do not choose the thermometer which is an exact register. Please note the difference. I understand there is a board of health represented here that does excellent work in everything except tuberculosis. I know one tuberculosis organization here that has said it could not hand over to its board of

health the splendid institutional work it was doing because it could not trust the board of health. Not long ago that very board of health was startled to find that a case it had diagnosed as chicken pox was in fact smallpox, and the delay of the health board in following the diagnosis of others was extremely disquieting. You are trusting your board of health with life and death every day; so when you take away from its care this special form of life or death, do not forget you are leaving it with the great responsibility for the health of your citizens. It pays to go behind the apparent necessity of doing this or that thing yourself, because you cannot do the whole thing yourself. A big part of your job is to make the public realize that the whole health work has to be done well. I know places where at this moment, if I were a trustee of a hospital, I should hate to hand it over to the public body; but I hope I should have courage to say why, before every election, and work hard to get a board of health I could trust. There are boards of health we all respect and fully trust and we must work to multiply their number. Why do some of you who are doing these tasks of the board of health give up the educational campaign? I asked Miss Acton—you know her paper last year was really a mirror of our actual doings—what effect it had, and she said, "So little that you can say it all over again if you want to." She thinks one reason why you do not care for an educational campaign is because you cannot get the money to carry it on. Then tell the public so. Tell the public of the division of work between the public and private agencies indicated by the statutes. Then ask for the money for the much-needed educational work, but don't think you can't get the money until you have tried.

I know a certain district where the death rate from tuberculosis is very high, and where the number of saloons to the population is also very high, and where the housing conditions are extremely poor. At a meeting of the doctors and teachers and representative people, generally, these things were admitted. Then the question came, "What will you do about it?" "Well," they said, "we know the people who own the houses, we went to school with the men who run the saloons; let us ask the city to give us another nurse."

That, ladies and gentlemen, takes us back to a story so old that the only excuse for repeating it is that the situation it fits is still with us. You remember the story of the town that had a precipice. The people used to fall over the precipice, and had to lie bleeding and injured, perhaps for a long time, until somebody came along and took them to the hospital; so the town selectmen met one day and voted that they should have an ambulance wait at the foot of this precipice in order to carry people to the hospital more promptly. It was many years before the town voted to put a fence at the top. That story is old, but we haven't built that fence yet.

To just simply nurse—it is splendid; but it is having a fire engine without any campaign of fire prevention. It is trying to put out the fire after it has started. It is palliative. It is deserving of all those words that socialists hurl at us. We must get behind to the real facts and causes and the prevention of them. And that must be, it seems to me, the main part of our program; or, if not the main part, at least an always present part. Begin with this essential part of the program, and add to it what you will. Get the facts of your town or city; bring those facts home to the people in every way that ingenuity and love can devise. You are the interpreters of this great pitiable, preventable thing. You remember Trudeau said, "Pity as an emotion passes, but pity as a motive remains." We all should see that this pity in our hearts remains as a motive to bring the story of the suffering we know so intimately to our public constantly; not only in an appeal for more nurses to take care of the people who are sick, not only for hospitals to segregate all the people who are dangerous, but above all to do these things,—prevent danger and prevent disease.

Just in closing, let me repeat a story, for sometimes a story recalls the moral. A lady and her pet dog started on a journey. The lady was fond of the dog and insisted that he should ride with her, but the conductor said that the dog must travel in the baggage car. She said, "Oh, dreadful!" And he said, "Oh, well, I will take him in." But she said, "No, I will take him in myself." So she carried him to the baggage car and tied him up herself. Some time later she asked the conductor, "How is my dog getting on?" "I don't know, madam," he said, "you tied him to a trunk, and the trunk was thrown out at a station fifty miles down the line."

Be careful what you tie to. The most essential thing of all that we should tie to in the whole tuberculosis work, splendid and necessary as all these curative things are, is the great campaign of education which spells prevention.

Annual Report of the Secretary, March 31, 1916.

Membership.

At the end of the first year thirty-four organizations were members of the League. At the end of this, the second year, four more have been added to the membership, namely: The Everett Instructive District Nursing Association; the Middleboro District Nursing Association; the Leicester Samaritan Society; and the Malden Anti-Tuberculosis Society, Inc.,—the last named of which has been formed by the union

of two older tuberculosis organizations. These additions bring the membership of the League up to thirty-six, and an effort has been made during the year to have organized anti-tuberculosis work started in several other communities.

New Offices and Equipment.

In February the League and the Boston Association for the Relief and Control of Tuberculosis moved their offices from 4 Joy Street to 3 Joy Street, where they now occupy a larger suite of rooms all on one floor.

A Special Committee, authorized for the purpose by the Executive Committee, has conferred with the Boston Association on the matter of running expenses, with the result that the League is now paying a portion of the rent of these offices and a share of the salaries of the workers. The League has also joined the Boston Association in purchasing a safe, while for its own use it has bought a typewriter and a Parcels Post Exhibit. Through the kindness of the Treasurer and the generosity of the Duthie-Strachan & Company, Inc., a simple system of bookkeeping has been installed.

Legislation.

At the time of our last annual meeting the Legislature was still in session, and it was therefore not possible to make up a final report on the twenty-three bills considered by the Legislative Committee of the League. We can now report that of the twelve bills approved by the League, seven became law, the others being rejected by the Legislature. Of the eleven bills upon which the League took no action five became law and six were rejected.

This year the Legislative Committee has considered forty-two bills. Thirty-two of these have been approved by the Committee, no action being taken on the other ten. The Legislature is still in session, so that it is again not possible to make a final report as to the disposition of the year's legislative bills.

One matter that has been discussed at some length by the Executive Committee, and upon which educational work is undoubtedly needed, is the failure on the part of physicians and others to report cases of tuberculosis, as required by law. A reference to the report of the Recess Committee on Tuberculosis shows that in almost one-fourth of the cities and towns in the state those responsible are exceedingly negligent in this direction. Unless we can enforce the good laws already on the statute books, no amount of new legislation will avail.

Red Cross Christmas Seals.

The accounts of the sale of Red Cross Christmas seals are now all in except from one city, and we are glad to report that 2,231,877 have been sold. This is a gain over last year of 403,895. These seals were sold by one hundred and thirty agents, eighty-five of whom were Anti-Tuberculosis Societies, District Nursing Associations, Associated Charities, Boards of Health and Women's Clubs. This figure does not include the hundreds of stores, banks, clubs and individuals who sold seals for the agents.

Ninety per cent., or $20,086.88, is the amount from the sale of seals secured for tuberculosis work in this state. Deducting from this $586.37 (the amount of expenses incurred in the sale) as reported by the various agencies, we have for use in the state the sum of $19,500.51.

Seven and one-half per cent. of the proceeds, or $1,931.48, is for the use of the League, and after deducting the expenses of the League, such as salaries, printing, postage, express, etc., which amounted to $327.97, we find that the League has a balance of $1,603.51 to be put into anti-tuberculosis work.

Publicity.

Under the head of publicity we include lectures, and the use of films and slides, and the printing and distribution of literature, such as legislative bills and press bulletins.

Literature.

A circular entitled "Is the Work of the Anti-Tuberculosis Society Finished?" was printed, and about nineteen hundred copies of it distributed. This circular stated in very positive language the continued need of Anti-Tuberculosis Societies as long as tuberculosis exists. The strength of the circular was emphasized by the fact that it was signed by the State Commissioner of Health, the Chairman of the Massachusetts Trustees of Hospitals for Consumptives and the President of the League.

Nine hundred copies of the annual report were sent out, and twelve National Association Press Bulletins, or a total of thirty-three hundred copies, were mailed to two hundred and seventy-five newspapers throughout the State.

One hundred and twenty-five copies of miscellaneous leaflets, some of which were supplied by the Boston Association, were distributed. This literature, with the three hundred and thirty legislative bills, one hundred circular letters on legislation, and letters urging social agencies of various kinds to do all possible to popularize the tuberculosis dispensaries, brings the total distributed up to about 6,655 pieces.

Lectures.

During the year fifteen talks, fourteen of them by your Secretary, were given on Tuberculosis or Open Air Schools in the following places:—Attleboro, Beverly, Braintree, Brookline, Danvers, Framingham, Lynn, Malden, Medford, Provincetown, Quincy, Scituate, Ware, West Newton, and Weymouth, with a total attendance of about three thousand persons.

Slides and Films.

Many of these talks were illustrated with slides loaned by the Boston Association, and on

several occasions slides were also loaned to other organizations.

The film "The Awakening of John Bond," belonging to the Boston Association, has been used with good effect in several lectures.

There is a widespread and increasing demand for this kind of educational work, and to the office of the League come persons from all over Massachusetts seeking information on various phases of the problem. So long as this continues to be the case, we feel that the League is filling a real need and rendering a genuine service to the state.

SEYMOUR H. STONE, *Secretary*, Boston.

Health Insurance.

A TIMELY BRIEF FOR HEALTH INSURANCE.

BY MR. JOHN B. ANDREWS,

Secretary American Association for Labor Legislation.

THE case for health insurance is presented in the timely brief recently published in New York by the American Association for Labor Legislation. The keystones of this argument in support of health insurance are the high sickness and death rates among wage-earners, the necessity for an extension of medical care among workingmen, the need for a systematic method of covering the wage loss incident to the sickness of the breadwinner, and the opportunity for increased effort to prevent sickness among wage-earners. These conditions, an analysis shows, cannot be met by existing agencies, and can be remedied, it is argued, only by compulsory health insurance.

The death rate among the better paid workers holding industrial life insurance policies is twice that of the "ordinary" policy holders consisting largely of business and professional men. In Massachusetts, deaths from tuberculosis account for 13.4 per cent. of the deaths among the industrial policy holders of the Metropolitan Life Insurance Company, whereas among the general population they account for but 9.3 per cent. "This," says Louis I. Dublin, statistician for the company, "is an important difference and may be directly charged to the greater life strain to which the industrial classes of the community are subjected." Among this same group the death rates from the so-called "degenerative diseases" are slightly higher than for the population as a whole, while the difference is especially marked in individual industrial cities. This high death rate is accompanied by a high degree of disability, due in part to the industrial health hazards to which workingmen are exposed. Industrial dusts, well-known promoters of tuberculosis, are not prevented in Massachusetts as they might be, as a federal investigation has shown.

Against this illness promoted by industry and involving an average of nine days of sickness per worker per year, and a national wage loss of $500,000,000 a year, the workman is powerless to protect himself. Accumulated savings, various investigators have found, are rarely possible on the wages paid; insurance, the alternative provision, covers only a small number comprising the better paid workers. Moreover, the entire burden now is thrown upon the employee, whereas justice demands that industry should pay for that portion of illness created by industrial conditions. In the absence of both savings and insurance, financial stress often prevents many from obtaining necessary medical attention. Actual investigations have revealed that in industrial communities 25 to 39 per cent. of those ill are without medical care, while in a city like Boston, it is estimated that one-fourth of the population is unable to pay for the requisite treatment at the rates customarily charged by private practitioners. This gap in the medical provision is not and ought not to be met by charitable institutions, which tend to pauperize and are, therefore, rejected by the independent workingman.

After an examination of various other alternatives, compulsory health insurance is offered as the solution for the present difficulties. Whether one accepts the conclusion or not, this timely brief gives arguments and facts which those interested in the work of the recently appointed Massachusetts Social Insurance Commission cannot afford to be without.

Book Reviews.

The Memoirs of a Physician—from the Russian of Vikenty Veressayev. Translated by SIMEON LINDEN. New York: Alfred A. Knopf. 1916.

This book will be of particular interest to the physician at the present time, when Russian literature is coming so much to the fore. It is the frankest revelation of the physician's inmost thoughts that we have seen, and is tinged with the characteristic Russian gloom and melancholy. Notwithstanding, there is much in this volume that will strike home to the American physician, and bring some of his earlier experiences in practice vividly to mind. Perhaps the most notable feature of these memoirs is the lesson taught of the necessity for practical bedside instruction to the student in his last years of med-

ical work. Almost on every page the author bewails his lack of familiarity with the practical side of illness, and the slight amount of practical work done in medicine and surgery before a medical degree was obtained. It would be inconceivable to a recent graduate of a good American school that a man could be a full-fledged physician, even without a hospital appointment, and feel so utterly at sea in regard to the common procedures of practical importance as our author does.

It would seem likewise to most American physicians, that the author takes too gloomy a view of the attitude of the patient's family towards the physician in cases that were of extreme severity or ended unfortunately. He graphically describes this in telling of his experience in treating a child desperately ill with pneumonia. He says, "In fact, without seeing the patient, I always unerringly guessed how he was by the expression of Katerina Alexandrovna's eyes, when she opened the front door; if he were worse, her face breathed ill-concealed dislike, if he were better, her eyes beamed on me with infinite tenderness." Probably all physicians have experienced similar occurrences; some families can never forgive the physician who finds out that there is some serious or fatal malady afflicting those that are dear to them. Few medical men will read this book without recognizing some of their innermost thoughts, their fears, doubts, and anxieties in the early years of practice, though it is probable that few have such a pessimistic view of what, after all, are but incidents common to medical practice.

The Practical Medicine Series. Under the General Editorial Supervision of CHARLES L. MIX, A.M., M.D. Vol. viii. Materia Medica and Therapeutics, Preventive Medicine, Climatology. Edited by GEORGE F. BUTLER, Ph.G., A.M., M.D., HENRY B. FAVILL, A.B., M.D., and NORMAN BRIDGE, A.M., M.D. Chicago: The Year Book Publishers. 1915.

This eighth volume in the Practical Medicine Series for 1915 deals compactly with the subjects enumerated in its title. The section on materia medica and therapeutics, which constitutes more than half the book, is divided into three parts, dealing respectively with drugs (the therapeutic agents being alphabetically arranged), with extracts of animal organs, bacterial therapy, sera and vaccines and with electricity, Roentgen rays, radium and radio-active substances. The section on preventive medicine by the late Dr. Favill deals with the physician in public health work, with the infectious diseases, with school children and contagious diseases, with industrial and social diseases, with general sanitation and with eugenics. The brief section on climatology by Dr. Norman Bridge deals with certain aspects of climate and disease. Though somewhat miscellaneous in its content, the volume is of definite value in completion of the admirable series of which it forms a part.

Infections of the Hand. A Guide to the Surgical Treatment of Acute and Chronic Suppurative Processes in the Fingers, Hand, and Forearm. By ALLEN B. KANAVEL, M.D., Assistant Professor of Surgery, Northwestern University Medical School; Attending Surgeon, Wesley and Cook County Hospitals, Chicago. Third edition, thoroughly revised. Illustrated with 161 engravings. Philadelphia and New York: Lea and Febiger. 1916.

The present edition of this well-known book is to be welcomed by the entire surgical profession. The form and outline are unchanged, but certain additions have brought the number of pages up to 500. There are two new chapters: The first, "Relation of Acute Infective Processes to Industrial Pursuits," by Dr. Harry E. Mock; the second, "Plastic Procedures Instituted for the Correction of Deformities."

Dr. Kanavel's book is practically beyond anything except the most favorable criticism. To each of the more extensive of the 29 chapters, he has added a brief résumé. If it were not for this, one might possibly feel that the book is a little too long; that 500 pages upon infections of the hand alone might be apt to keep the average student from that very thoroughness of study upon which Dr. Kanavel properly insists. A careful examination of the book, however, shows that it covers, for all practical purposes, not only infections of the hand, but also infections of the forearm. Furthermore, the statistics from industrial sources show not only that infections of the hand are extremely common, but that their sequels are very serious and together they form an unexpectedly large proportion of the disabilities due to accidents in the working classes. When these two facts are considered, together with careful records of cases and their final results, it becomes evident that the book is not too large.

Dr. Kanavel brings to his task enthusiasm, enormous industry, careful observation, extensive clinical experience, anatomical investigation, and finally, the follow-up system, which, taken altogether, make his book an ideal one-man treatise.

The question which sometimes bothers the reviewer brought face to face with the steadily increasing number of textbooks, "why was this textbook undertaken?" can never arise in relation to this volume. It was undertaken to add to the existing knowledge of an important aspect of surgery, and it has been most successful in achieving this end.

Every advanced student and every surgeon should have it close at hand.

THE BOSTON
Medical and Surgical Journal

Established in 1812

An independently owned Journal of Medicine and Surgery, published weekly, under the direction of the Editors and an Advisory Committee, by the BOSTON MEDICAL AND SURGICAL JOURNAL SOCIETY, INC.

THURSDAY, OCTOBER 12, 1916

SUBSCRIPTION TERMS: $5.00 *per year, in advance, postage paid, for the United States.* $6.56 *per year for all foreign countries belonging to the Postal Union.*

An editor will be in the editorial office daily, except Sunday, from twelve to one-thirty p. m.

Papers for publication, and all other communications for the Editorial Department, should be addressed to the Editor, 126 *Massachusetts Ave., Boston. Notices and other material for the editorial pages must be received not later than noon on the Saturday preceding the date of publication. Orders for reprints must be returned in writing to the printer with the galley proof of papers. The Journal will furnish one hundred reprints free to the author, upon his written request.*

The Journal does not hold itself responsible for any opinions or sentiments advanced by any contributor in any article published in its columns.

All letters containing business communications, or referring to the publication, subscription, or advertising department of the Journal, should be addressed to

ERNEST GREGORY, *Manager,*
126 Massachusetts Ave., Corner Boylston St., Boston, Massachusetts.

INDUSTRIAL HEALTH INSURANCE.

THE brief for health insurance, published in this number, may well be called timely, in that the matter is one on which medical men should be informed, whatever their attitude as to the desirability of such form of insurance. This is particularly important in view of the fact that if such insurance is to come, it is incumbent on the profession to see that its own rights and privileges are not too much abridged. There is an advantage in working under an insurance act, because payments are assured, and not at the whim of the wage-earner, as is so often the case today. There is, however, a danger that compensation will be placed too low; a still greater danger that the administration of the act will make the practice of medicine in industrial communities far less comfortable and satisfactory for the doctor, and the relation of patient and family physician is necessarily going to be somewhat modified and interfered with.

A committee of the Massachusetts Medical Society, appointed last June, has been working with this end in view. If such legislation is to be passed, it is essential that the medical side of it should be considered. Mr. Andrews' communication tacitly recognizes that there is a medical side, but pays no attention apparently to the necessity of considering this side. The danger in any legislation of this sort is that the economic theorist figures on the broad principles involved and is likely to seek legislation along the lines of the best broad theory, without stopping to figure who is hit or how the people, who have the work to do, are going to be helped or hindered in doing it.

It is just for this reason that it is important not only that there should be a committee, but that the mass of the profession as a whole should be informed and ready to do what they can to see that no mistakes are made. This is true whether the individual thinks that this sort of social insurance is moving in the right direction or not. Those who are best qualified to judge seem to feel that some legislation of this sort is bound to come; perhaps not this year, but within a few years. If the medical profession do not look out for themselves in the matter, it is pretty certain that no one else will look out for them.

THE RÔLE OF THE STATE TUBERCULOSIS SANATORIA.

THE word "sanatorium" coming from the Latin *sanare* (to heal), implies that at such an institution active efforts are made to cure, or at least to arrest, the disease. It is, likewise, proper to infer that at a real sanatorium only those patients are admitted who are in the curable stages of the disease and who offer fair prospects of permanent arrest of the pulmonary process.

Ever since its foundation, the Rutland State Sanatorium has been reserved for patients in the early, favorable and incipient stages of the disease. Patients who are known to be far advanced or in the progressive stages are not accepted. The medical and lay public realizes the wisdom of this ruling, with the result that very few complaints arose when a comparatively short while ago the so-called "one month" regulation began to be enforced. According to this one-month ruling, every patient entering the Rutland State Sanatorium is placed on trial for

this period. If, at the end of this time, he is found to be in the advanced or progressive stages of the disease, or in any other ways, he is not considered a suitable patient for this particular institution, he is transferred to another sanatorium or sent elsewhere. Thus the condition of affairs, as far as the Rutland State Sanatorium is concerned, although not yet entirely satisfactory, is at least fairly so, and one that is constantly improving.

This is not altogether the case with the three remaining State sanatoria, at North Reading, Lakeville and Westfield. In many ways these three institutions, which were opened in the years 1910 and 1911, are vastly better suited for the care and treatment of patients in the early stages of tuberculosis than is the case at Rutland, which was built in 1898. At the time they were opened, however, the incipient consumptive could be cared for fairly well at Rutland, while there were practically no accommodations for that most pathetic and dangerous of cases,—the advanced consumptive. As a result, beds at these newer sanatoria were at once filled with patients, most of whom were in the advanced stages of the disease. It was not intended by the Board constructing these three institutions that they should be homes for advanced and incurable consumptives; yet because of certain unavoidable circumstances which led to the immediate admission of many patients of this class, they have come to be looked upon as places where patients in any stage of the disease can go and receive treatment. This is an unfortunate state of affairs, and one which, to a large extent, defeats the very end for which these sanatoria were planned.

At the present time, there is a large number of beds in local tuberculosis hospitals intended for sick and advanced consumptives, while, in addition a bill has been passed and definite appropriation made for county tuberculosis hospitals, which will provide beds for those communities without local tuberculosis hospitals of their own. There would seem to be, therefore, no reason why the North Reading State Sanatorium, the Lakeville State Sanatorium, and the Westfield State Sanatorium should not fill the rôle for which each was originally intended, *i.e.*, an institution where tuberculous patients in the curable, though not necessarily incipient, stages of the disease could receive active and aggressive treatment. At these institutions no line is drawn at the word incipient. At Rutland every effort is made to admit only those patients who are really in the first stage. At the other sanatoria, this distinction is not drawn, the sole qualification being that the patient should be considered capable of ultimate arrest or, at least, of marked improvement.

It is to be hoped that the medical profession of this State will realize the wisdom of this viewpoint, and will coöperate in every way with the superintendents of these institutions and the board of trustees, so that municipal and county tuberculosis hospitals will be used more and more for the advanced, progressive and dying consumptive, leaving our four State sanatoria to play the part in the tuberculosis campaign originally assigned to them.

PROGRESS OF POLIOMYELITIS.

DURING the past week the epidemics of poliomyelitis have continued to increase in Massachusetts and to decline elsewhere throughout the country. In New York City on October 6, the number of cases reached a total of 9118, with 2321 deaths. In New York State, outside New York City, the total number of cases on September 26, was 3301, with 589 deaths, and in New Jersey on the same date, 3571. On September 18 the number of cases in Pennsylvania reached a total of 1308; in Minnesota, 669; in Connecticut, 789, and in Illinois, 563.

In Massachusetts 198 new cases of poliomyelitis were reported during the first seven days of October, making a total of 1215 in this State since January 1. During 1915 there were only 135 cases reported. There were 151 in 1914, 361 in 1913, 169 in 1912, 232 in 1911, 845 in 1910 and 923 in 1909. Of the total number of cases in the present epidemic, 245 have been in Boston. In this epidemic thus far there have been 150 deaths, of which 16 occurred in July, 39 in August, and 95 in September. There have been 284 cases in Boston and 82 in Holyoke.

In last week's issue of the JOURNAL we noted editorially the organization of the Harvard Infantile Paralysis Commission to conduct research into the transmission and treatment of poliomyelitis, and to constitute a clearing-house for the collection and free distribution of therapeutic blood serum. At the close of the first week of its activity, this commission issued the following report of its work:

"The commission has assisted in the diagnosis and treatment of 20 cases. The serum obtained from the blood of those who have recovered from the disease in the past has been given in 14 cases. Of these, two, who had been ill for some time, died; four were paralyzed before the serum was given, and of the remaining eight, who were given serum in the earliest stages of the disease, none has as yet developed paralysis. These results are encouraging for the use of serum in the earliest stages of the disease.

"Too much emphasis cannot be laid upon the fact that beneficial results from the use of serum can be hoped for only when it is given in the very earliest stages of the disease, and before the evidence of even the slightest paralysis appears. The experts of the commission are on call day and night at the Harvard Medical School to respond to requests from physicians for assistance in the early diagnosis of the disease and for administering serum, if desired. The serum and the services of the diagnosticians are furnished free of charge by the Harvard Commission.

"More serum is urgently needed if the commission is to respond to all the demands made upon it. In the first week 15 persons have volunteered and permitted the required small amount of blood to be taken from them by a process which is without the slightest danger. The commission will gladly pay the traveling expenses of those who wish to volunteer and will come to the Harvard Medical School."

On October 3, Dr. Linsley R. Williams, of Albany, New York, deputy state commissioner of health, announced that the New York State Department of Health had organized a comprehensive plan of after-care for survivors of poliomyelitis throughout the state. Outside of New York City these number 2712. To establish and administer the details of this work, Dr. Robert W. Lovett, professor of orthopedic surgery at the Harvard Medical School, has been appointed. In addition, he will conduct clinics at various places in every county of the state, and will disseminate instruction relative to re-education of paralytics. Dr. Armitage Whitman of New York City, and Dr. John P. Hodgens, of Boston, will be associated with Dr. Lovett, and will devote their entire time to the work.

COLUMBUS AND SYPHILIS.

A particular pertinence attaches to the publication, as the leading article of the present issue of the Journal, on Columbus Day, of Dr. Downing's scholarly paper on the question of the American origin of syphilis and its importation into Europe by the returning sailors of Columbus. Whatever the ultimate decision on this point, his article directs attention to an interesting and important topic of medical epidemiologic history, and to the classic contribution of Fracastor, which should be familiar to physicians as the beginning of the literature of this disease.

MEDICAL NOTES.

American Hospital Association.—The eighteenth annual meeting of the American Hospital Association was held at Philadelphia, on September 26 and 27, under the presidency of Dr. Winfield H. Smith, superintendent of the Johns Hopkins Hospital, Baltimore. In his presidential address at the opening session, Dr. Smith discussed the subject of political domination of the administration and staff appointments of municipal hospitals.

Mental Defectives in the District of Columbia.—The Children's Bureau of the United States Department of Labor has recently investigated the subject of feeble-mindedness in the District of Columbia. Of the 33,000 inhabitants of the district, there are about 1500 insane, and in addition, 798 feeble-minded. Of these feeble-minded, 97 were in appropriate institutions, 249 in inappropriate institutions, and 452 were not in institutions.

Yellow Fever in South America.—Report from New York states that, on September 26, Dr. William C. Gorgas and four other members of the Rockefeller Yellow Fever Commission, of which he is chairman, returned to the United States aboard the steamer *Brazos* from Porto Rico after a tour of inspection through Ecuador, Peru and Colombia. The commission reports that yellow fever was found in only one of the ports visited, namely, Guayaquil, Ecuador, where the disease has been endemic for the past fifty years, and the deaths from it average 35 a month. On October 7 the commission again sailed from New York for Rio Janeiro, Manaos, Pernambuco and Bahia.

Peerage for a Canadian Physician.—It was announced in the *London Gazette*, under a writ dated September 8, 1916, that Dr. Gervase Bisney Alexander, Esq., had been summoned to the House of Lords under the title of Baron of Cobham. This action represents the revival of the ancient barony of Cobham by calling it out of abeyance in favor of a well-known Canadian physician. This barony of Cobham, which should not be confused with the Viscounty of Cobham, was suspended by the Act of Attainder of 1603. The original claimant was Dr. Reginald Gervase Alexander of Halifax, N. S., who has recently died, and who was the father of the new peer.

"As long ago as 1912 the proceedings took place before the committee of privileges, which resulted in the calling out of abeyance of the Baronies of Strabolgi, Burgh and Dudley, and the restoration of the Barony of Cobham. It was in 1487, 1322 and 1313 that the three former peerages were created by writs of summons, and they became united in the person of a Lord Burgh, who died in 1597, leaving four daughters, his eventual coheiresses, amongst whom the titles fell in abeyance. The petitioners claimed to be the representatives of one of the daughters. The last holder of the three baronies was the Lord Cobham who was attainted of high treason in 1603, and died before 1606. He was the tenth baron, and before the committee of privilege it was shown that Henry de Cobham was summoned by writ as a peer in 1313."

CHANGES IN COST OF DRUGS.—Report from New York on September 29 notes the following recent changes in the cost of drugs.

"Sharp advances occurred in denatured and wood alcohol, owing to an increase in domestic and export trade. Sales of muriate of potash were reported at a further material rise.

No new features developed in the opium situation. There was seemingly no improvement in the demand from domestic buyers, but the market remained steady at the late advance to $11 per pound for gum. Powdered and granular were unchanged at $11.70 and $11.85 per pound, respectively.

Denatured alcohol was higher. Demand for domestic and export account has increased recently, and leading distillers announced an advance in prices of five cents per gallon to 55 and 57 cents, according to quantity, the inside figure being for carloads.

Wood alcohol was also advanced five cents per gallon by leading distillers to 70 cents per gallon for 95 per cent., and 75 cents for 97 per cent in carloads.

Glycerine was advanced by leading Eastern refiners to 44 cents per pound for chemically pure in drums."

DECLINE OF THE ENGLISH BIRTH RATE.—The British National Council of Public Morals appointed in 1913 a commission to investigate the causes of the declining British birth rate, and to make recommendations upon means for combating them. This commission has recently issued its report. After reviewing the evidence of vital statistics and testimony, the commission postulates the following propositions which it considers to be definitely established.

"1. That the birth rate has declined to the extent of approximately one-third within the last thirty-five years.

2. That this decline is not, to any important extent, due to alterations in the marriage rate, to a rise of the mean age at marriage, or to other causes diminishing the proportion of married women of fertile age in the population.

3. That this decline, although general, has not been uniformly distributed over all sections of the community.

4. That on the whole, the decline has been more marked in the more prosperous classes.

5. That the greater incidence of infant mortality upon the less prosperous classes does not reduce their effective fertility to the level of that of the wealthier classes.

On the economic and social aspects of the subject the commission drew attention to the argument that an improvement in the birth rate would be facilitated by such conditions as greater security and regularity of income, with adequate insurance against unemployment among all ranks of workers. This view, they point out, is not supported by the statistical evidence available. Not only do the better-to-do classes restrict more closely the size of their families, but even among certain of the wage-earning classes the birth rate varies inversely with the income.

In a section of the report dealing with the housing question, the commission put on record their opinion that both in town and country the present state of things makes the rearing of large families by the working classes a matter of great difficulty and has an effect upon the birth rate. Other sections deal with the medical aspects and the moral and religious aspects of the subject.

An addition to the report is signed by twenty-four members, who are of opinion that something more will be expected from the commission. They deal with two questions:

(1) Is the present decline of our national birth rate regrettable?

(2) If it is regrettable, is it preventable, and if so, how?

The signatories set out reasons why they consider an increase of the population desirable, so far as it is consistent with improvement. They point out that with more intensive culture of the land this country could satisfactorily support a larger population, and that this possibility is much extended if we take into account the whole British Empire. A number of proposals, many of them of an economic character, are also put forward for consideration as tending to further the object in view. They include a living wage, bonuses for families under certain conditions, relaxation of the income-tax arrangements, increased facilities for good education, adequate housing accommodation at reasonable rents, and measures to encourage the full development of natural resources both at home and in the Dominions beyond the seas."

EUROPEAN WAR NOTES.

AMERICAN MOTOR AMBULANCES IN RUSSIA.—Report from Petrograd states that, on September 25, a fleet of fifteen motor field ambulances, presented by a group of Americans to the Russian government, was formally accepted by the

Empress Alexandria and the Grand Duchess Tatiana. The presentation was made by Cap tain Philip Lydig and Dr. Philip Newton, under whose command the cars were sent to the front on September 26.

War Relief Funds.—On Oct. 7 the totals of the principal New England relief funds for the European War reached the following amounts:

Secours National Fund	$214,669.17
French Wounded Fund	124,277.70
French Orphanage Fund	65,431.85
British Imperial Fund	65,277.00
Surgical Dressings Fund	48,020.45

MEXICAN NOTES.

Return of Field Ambulances.—On September 25 the First Massachusetts Field Ambulance, and on September 26, the First Rhode Island Ambulance Company, returned from the Mexican frontier to their respective homes.

Sick and Death Rates at the Front.—Report from Washington, D. C., on September 26, states that during the week ended September 23 the morbidity rate among troops of the National Guard at the Mexican frontier was 2.38, with six deaths, as against 2.13 and five deaths for the week ended September 16. The corresponding figures among regular troops were 2.53 with seven deaths, and 2.63 with two deaths.

BOSTON AND NEW ENGLAND.

The Week's Death Rate in Boston.—During the week ending Oct. 7, 1916, the number of deaths reported was 209, against 216 for the same period last year; with a rate of 14.33, against 15.05 last year. The number of deaths under 1 year of age was 34, against 48 last year; and there were 62 deaths aged over sixty years, against 57 last year.

The number of cases of principal reportable diseases were: diphtheria, 33; scarlet fever, 9; measles, 3; whooping cough, 6; typhoid fever, 10; tuberculosis, 56.

Included in the above were the following cases of non-residents: diphtheria, 7; tuberculosis, 4; scarlet fever, 3.

Total deaths from these diseases were: diphtheria, 2; whooping cough, 1; typhoid fever, 3; tuberculosis, 11.

Included in the above were the following deaths of non-residents: typhoid fever, 1; tuberculosis, 1.

New England Association of Jefferson Medical Alumni.—The tenth annual meeting of the New England Association of the Jefferson Medical College Graduates was held at Hartford, Conn., Tuesday, September 19, 100 being present. The banquet was held at the Country Club at Farmington, at 8 p.m., transportation being provided by auto from Hartford by Dr. Eckley R. Storrs, vice-president. The opening address was made by Vice-President Storrs, and the reports of the secretary and treasurer were read and accepted, and the following officers elected for 1917: president, Eckley R. Storrs, Hartford, Conn.; vice-president, Albert C. Getchell, Worcester, Mass.; treasurer, Frank I. Payne, Westerly, R. I.; secretary, Wallace P. MacCallum, Boston, Mass. The party then adjourned to the banquet hall, where Dr. J. W. Felty of Hartford, acting as toastmaster, introduced the following speakers, with these subjects: Address of Welcome, Hon. F. A. Hagarty, Mayor of Hartford; "Jefferson and Its Relation to Amalgamation," Prof. Edward Parker Davis, Jefferson Medical College, Philadelphia; "Foibles in Medicine, from an Insurance Standpoint," W. G. Cowles, Esq., Travellers' Insurance Company, Hartford; "Hartford's New Water System," Caleb M. Saville, C. E., Hartford; "Things That I Have Heard about Doctors," William H. Worrell, Ph.D., Professor of Arabic, Hartford Theological Seminary. After brief talks by Dr. George L. Porter, 1865, of Bridgeport; John T. Farrell, M.D., of Providence, R. I.; James A. Mansfield, M.D., of Boston; and Charles A. Riley of Boston, the party adjourned. It was voted to hold the next annual meeting at Worcester, Mass.

Insanity in Massachusetts.—According to the recently issued seventeenth annual report of the State Board of Insanity, covering the year ended November 30, 1915, there were 18,137 people under its care, being 1 such person to every 203 of the population of the State. Of this number, 14,746, or 81%, were insane; 2604; or 14%, feeble-minded; and 649, or 3%, epileptic (sane). Their increase for the year was 833. The whole number of such persons under public care was 17,702; under private care, 435. The increase of such persons under public care for the year was 834; their average annual increase for the last five years, 596. The nativity of first cases of insanity does not differ materially from the percentages of the previous year. Exclusive of 37, or 1.17%, whose birthplaces were unknown, 1241, or 39.90%, were born in Massachusetts; 1522, or 48.93%, in New England; 1692, or 54.41%, in the United States; and 1418, or 45.59%, in foreign countries.

Typhoid Fever in Boston.—A recently published monthly bulletin of the Boston Health Department shows that during the first eight months of 1916 only twelve deaths from typhoid fever occurred in this city, the lowest number on record for that period since 1856. In 1915 Boston had the lowest typhoid rate of all the large American cities, only 5.3.

"This rate will place Boston on a par with the large European cities having low rates, such as London, Berlin, Vienna, Copenhagen, Edinburg, Christiania, and in the van of all American cities.

"We have but to look back only a few years

to realize the great decrease that has taken place in deaths from typhoid fever in this city. In 1908 there were 158 deaths from this disease, in 1914 there were 66, in 1915 only 40, and thus far this year but 12. During the period between 1906-10 the death rate from typhoid fever was 16.0, in 1914 it was 9.2, last year 5.3, and this year it is hoped that it will not exceed 2.5."

NEW CLINIC AT BOSTON DISPENSARY.—On October 2 a new combined clinic for the treatment of diseases of the nose, throat and ear was opened at the Boston Dispensary. It was formed by uniting the previous separate departments for diseases of the ear and of the throat. The new department will be under the direction of Dr. Frederic C. Cobb, with whom will be associated Dr. William E. Chenery, Dr. W. S. Boardman, Dr. Edward R. Newton and Dr. Henry J. Inglis.

WALTHAM TRAINING SCHOOL.—The annual graduation exercises for the Waltham (Mass.) Training School for Nurses were held in that city on September 29. The principal address was made by Dr. Charles F. Painter, and diplomas were awarded to a class of thirteen pupil candidates.

HEALTH WORKERS OF NORTHEASTERN MASSACHUSETTS.—A regular monthly meeting of the Association of Health Workers of the Northeastern District of Massachusetts was held at Everett, Mass., on September 28, under the auspices of the local Board of Health, and was attended by over three hundred members and guests. The chief topic of the meeting was the prevention of tuberculosis among predisposed children.

"Dr. Thomas Harrington, deputy commissioner of the State Board of Labor and Industries, spoke on 'School Hygiene.' He advocated open-air schools, or at least an open-air schoolroom for children predisposed to tuberculosis. He urged that school hygiene should be taught as a necessary step to a successful fight against tuberculosis.

"Dr. Richard M. Smith of Boston spoke on 'Tuberculosis in Childhood,' and urged early diagnosis of suspected cases. Dr. John A. Brewin of the Everett Board of Health talked on the problems of the local campaign.

"An illustrated health talk was given by Dr. Lyman Asa Jones, director of the division of hygiene of the State Department of Health. 'The Tuberculosis Dispensary System' was the subject of Dr. Eugene R. Kelley, and Dr. Arthur A. Brown, State district health officer, spoke on the problems of the Northeastern district."

The next meeting of the Association is to be held at Newburyport, Mass., on November 9.

THE FAULKNER HOSPITAL, JAMAICA PLAIN, MASS.—The twelfth annual report of the Faulkner Hospital, which covers the year ended May 1, 1916, announces a legacy of $8,000 from the estate of Frances G. Curtis. This is to be held as a fund for maintaining a free bed, the second memorial bed thus far given to the hospital. The nucleus of a fund for another free bed has been started by friends of the hospital in West Roxbury. The most notable feature in the work of the hospital is stated as being the growing demand for maternity service. The building of a maternity ward was seriously considered a year ago, and this year the trustees have voted to erect such a building, and the necessary appropriations have been made. Some of the rooms in the new building intended for patients will, however, have to be used for nurses until funds can be secured to provide additional accommodations for them. Seven nurses were graduated from the training school during the year. It is hoped that it will be possible at an early date to provide a social worker for the hospital in order that intelligent treatment and care can be continued to many patients who are in need of such attention after they leave the hospital.

Miscellany.

THE SANITARY PROGRESS AND VITAL STATISTICS OF HAWAII.

IN a pamphlet compiled by Frederick L. Hoffman, LL.D., statistician, and issued by the Prudential Insurance Company, is contained a detailed account of the sanitary condition and progress of Hawaii from the time of its discovery by Cook in 1778 to the present day. Physically of a superior type, the native Hawaiians present an interesting study of the effect of civilization and its attendant diseases on a primitive people. Syphilis, according to one authority, was unknown in the islands before the visit of Cook in 1778, but in 1839 the disease was excessively prevalent and malignant. Leprosy is mentioned as having been unknown until about the year 1840, when it is believed to have been introduced by Chinese immigrants. In 1890 the number of lepers segregated at Molokai was 1213, but this number was by no means considered as representative of the full extent of the evil. Smallpox was first introduced in 1853, from San Francisco, and in eight months the disease carried off 8% of the population. The introduction of tuberculosis, and its rapid spread among the native races of the Southern Pacific, according to numerous authorities, dates from the time of the settlement by the Europeans, when the natives were induced to make considerable changes in their mode of life.

As recently as 1872, an official census gave the number of full-blood Hawaiians as 49,044, and only 2487 mixed-bloods of part Hawaiian

ancestry, a total of 51,531. At the present time the number of full-bloods has been reduced to 26,041 and the number of mixed-bloods has increased to 12,506, giving a total native population of 38,547. In the mean time the foreign-born population has increased enormously. In 1910 it numbered 191,909. In 1892 the prevailing diseases among the Hawaiians were pulmonary tuberculosis and the various forms of chronic kidney and liver troubles, with their sequelae, chiefly attributed to the immoderate use of native and imported intoxicants. Syphilis was reported as apparently on the increase among native Hawaiians. The birth rate of the territory for the year 1914 was 29.7 per 1000 of population. For the pure Hawaiians the birth rate was only 19.8 per 1000, but for the part Hawaiians it was 49.7. The corresponding death rate for these two elements was 39.4 for the pure Hawaiians and 14.2 for the part Hawaiians.

"The mortality from cancer is of exceptional interest. The average rate during 1911-13 for all races was only 3.8 per 10,000, but for the pure Hawaiians the rate was 9.4, followed by 5.8 for the Portuguese, 2.7 for the part Hawaiians and for the Chinese, and only 2.0 for the Japanese. In view of the fact that the average mortality from malignant disease in the United States registration area is 7.7 per 10,000 of population, it is extremely significant that among the pure Hawaiians the prevailing rate should be 9.4.

"In view of the world-wide interest in the cancer problem an additional table has been provided showing the proportionate mortality from cancer, by organs and parts and according to race. Among the pure Hawaiians 29.4% of the deaths from malignant disease was due to cancer of the uterus, followed by 27.5% for cancer of the stomach, and 13.7% for cancer of the breast. Among the Portuguese, Chinese and Japanese, most of the recorded deaths from cancer were of the stomach, uterus, liver and intestines. In other words, such deaths as were recorded among these elements were chiefly cancers of the inaccessible organs. It is, therefore, a safe assumption that, in the main, the low rate among these elements is not attributable to serious errors in terminal diagnosis or defects in death certification. Since cancer is relatively very rare among primitive races, it is extremely suggestive that, after more than a century of contact with Europeans, the native Hawaiians should have attained to a cancer mortality even in excess of the corresponding cancer death rate of the registration area of the United States. The same tendency towards a rapid increase in the mortality from cancer has been observed in the United States among the American negroes during their period of freedom, and attention may be directed to the fact, not generally known, that cancer of the uterus is now relatively more common among negro women, in the large cities of the South at least, than among white women in the same locality. The extreme rarity of cancer of the breast among Japanese women may also be referred to as a most interesting phase of the cancer problem, which has heretofore received inadequate consideration. A thorough study of the mortality from cancer in the Territory of Hawaii would, therefore, make an extremely valuable and interesting contribution to the cancer cause."

BALDWINSVILLE HOSPITAL COTTAGES.

THE following letter from Dr. H. Lewis Stick, superintendent of the Hospital Cottages for Children at Baldwinsville, Mass., has recently been published in the daily press. It calls attention to the need of this institution for more funds to enable the continuance of its valuable work for defective children:

"The Hospital Cottages for children, which is located in Baldwinsville, Mass., was established in 1882, and the present buildings erected in 1890. It now has 105 children to care for, the larger number being boys. It has a capacity for 150. The hospital was established for sick and invalid children, those who are in need of country fresh air, who have some malady necessitating a quiet, well-located country place, of high elevation, with good, wholesome surroundings. The rickety child, those of inanition and those suffering with Pott's disease, the effect of infantile paralysis, and other orthopedic cases are and have been cared for in this place for many years. We are able to supply good, wholesome food from a farm of over 500 acres of the best land in this section of Massachusetts, located on a site of almost 1100 feet elevation, the farm proper about 1200 feet in the town of Baldwinsville. The land extends to the town and station, but the hospital buildings are located about a mile from the same, but so situated that a view of the town, railroad and station can be seen from almost any ward of the institution. All the milk and most of the vegetables raised on the farm are used by the institution, all of which is wholesome and of the very best for growing children.

"Most of the children we now have and have had are of school age and many of them are able to profit by such instruction. Two schools are maintained at the hospital in a building especially designed and provided for such purposes. One school is a mixed one for kindergarten and the primary grades, and the other for more advanced pupils of all grades. As the children grow in age and strength they are introduced into the kindergarten department, where their dormant minds are stimulated by coming in contact with other children who have already had the advantages of a certain amount of school life. The kindergarten is in charge of a most capable teacher, one who has devoted

many years in preparing herself for this work. In many cases the school attendance has been interrupted before coming to the hospital, and many children here for treatment or other ailment may be defective. Much of the teachers' work is individual along lines of special schools for backward and slow-developing children.

"Children between two and fourteen years of age are admitted to the hospital at any time, no commitment being necessary. All cases are admitted upon the voluntary application of those who are responsible for their care and support. Parents or guardians do not relinquish their rights or responsibility for them further than their care, treatment and training for the time being. Any case may be received without formality if the support of the child has been provided for as to the weekly cost of same. Application blanks and further information may be obtained upon request by addressing the superintendent.

"A certain number of charitable cases are taken, where only part of the expense can be covered by the parent, and a special charity rate of $3.25 per week has been established for board, care and treatment through the Commonwealth for suitable cases dependent upon the State or city for support.

"The average weekly per capita cost has been $6. For those outside of Massachusetts the rate is seldom less than cost. If private nurses or any extraordinary attention is required, this charge is graded to fit conditions.

"The income from invested funds now amounts to almost $340,000, which we hope will be increased to a million dollars before long, as in this way we may be able to care for a greater number of charitable cases, and the contributions of charitable people, the Woman's Board, and others, make it possible to offer rates below cost, as low as $3.25 per week. In cases unable to pay more, children may often be supported by some society organization of their own community, a written agreement for support being required. As the hospital is supported largely by voluntary contributions, donations of all kinds are earnestly solicited. Funds of smaller or larger denominations are accepted. A free bed can be maintained by an annual payment of $200. An endowment of $5000 will maintain a free bed permanently. We now have ten free beds. This applies to patients within the State. For those outside the State, $10,000 at least will be necessary. Notice of a desire to establish a free bed may be sent to the superintendent of the hospital or to any other officer of the institution.

"All kinds of bed linen, furnishings and hospital equipment and appliances for deformed infantile paralytic children are needed, as well.

"We hope to increase our funds to secure a new operating room and x-ray room, a workshop for making all appliances for the deformed children, a plaster room, also an industrial room which should be fully equipped, as well as playthings to establish a play pavilion for all the children.

"We hope that the many friends of the hospital may help by the solicitation of others, who can help so much to bring sunshine and happiness to those who have been unfortunate through accident and disease."

OCCUPATION AND HEALTH IN ADOLESCENCE.

IT is so well recognized that certain occupations may involve serious dangers to young, growing persons that most States now have their child labor laws. Massachusetts, which has been a leader in legislation of this character, is now engaged in a systematic effort to collect information that may be of value in determining the need of changes in its present laws and regulations governing the employment of minors. At the request of the Massachusetts Board of Labor and Industries, Assistant Surgeon M. Victor Safford of the United States Public Health Service was detailed by the Federal Government to coöperate with the State authorities in a study of the effect of employment in various occupations on the health and physical development of children now permitted by law to work therein. A report of this study with respect to the cotton manufacturing industry of Massachusetts has just been published by the Federal Government as Public Health Bulletin No. 78, entitled "Influence of Occupation on Health During Adolescence."

The physical condition of over 600 boys between the ages of 14 and 18 employed in this industry in different parts of the State received careful study. It was brought out that in Massachusetts, boys between these ages, for the most part, do not remain long in the cotton mills. This fact and the strict regulations of the State governing the employment of minors may not make some of the conclusions reached in this local investigation equally true elsewhere, but among the facts disclosed, the following may be mentioned:

A considerable proportion of the younger boys, and also of those over sixteen, were undersized and physically undeveloped for their ages, while those between fifteen and sixteen averaged larger than other classes of boys of their age with which comparisons were made. This fact is explained by the accumulation in the mills of strong boys waiting to reach the age of sixteen to go into permanent "full time" occupations. The presence of a noteworthy proportion of undersized boys is not ascribed to the effects of the occupation, but to the fact that the cotton mill offers one of the few chances of employment for undersized boys. Evidence of injurious effects of their work or working conditions, even of the temperature and humidity of the mills, on normal boys, was seldom found, although further

investigation of possible effects of atmospheric conditions is recommended. Probably as a result of the State regulations relative to the issuance of employment certificates comparatively few cases of dangerous diseases were discovered. There was, however, a wide variety of defective conditions disclosed by the investigation, many of them of such a character as to impair seriously the future health and economic usefulness of the individuals concerned, if not remedied.

HEALTH INSURANCE.

TWENTY-FIVE out of every 1,000 employees in American industries, according to recent statistics, are constantly incapacitated by sickness, the average worker losing approximately nine days each year on this account. This "noneffective rate" for the great army of industrial workers in the United States barely suggests the total money loss to employers and employees. The lessened efficiency, the effects of reduced earnings in times of sickness, as well as the cost of medical attention, and the economic loss from deaths, swell the cost to industry and to the Nation to almost incalculable figures.

That much of this loss is nothing less than preventable waste, and that this waste can be largely reduced by a properly conducted system of governmental health insurance for wage-workers, are conclusions set forth in Public Health Bulletin No. 76, containing the results of a study of "Health Insurance—Its Relation to the Public Health," just issued by the United States Public Health Service.

The preventive value of health insurance is given especial emphasis in this study. "Any system of health insurance for the United States or any State should at its inception have prevention of sickness as one of its fundamental purposes," says the bulletin. "This country should profit by the experience of European countries, where prevention is being recognized as the central idea necessary to health insurance if health insurance is to attain its greatest success in improving the health and efficiency of the industrial population."

Such a system, it is pointed out in the bulletin, would:

1. Provide cash benefits and medical service for all wage-earners in times of sickness at much less cost than is now possible. Adequate medical relief would thus be placed within the reach of even the lowest paid workers, who are most subject to ill-health.

2. Distribute the cost among employers, employees, and the public, as the groups responsible for disease-causing conditions, and afford these groups a definite financial incentive for removing these conditions. This can be done by means of small weekly payments from employees, supplemented by proportionate contributions from employers and government at a rate reducible in proportion to the reduction of sickness.

3. Become an effective health measure by linking the coöperative efforts of the three responsible groups with the work of National, State and local health agencies, and by utilizing these agencies in the administration of the health insurance system.

4. Afford a better basis for the coöperation of the medical profession with public health agencies.

5. Eliminate the elements of paternalism and charity-giving by making employees and the public, as well as employers, joint agents in the control of this fund.

"A governmental system of health insurance," concludes the study, "can be adapted to American conditions, and when adapted will prove to be a health measure of extraordinary value."

AN INSTANCE OF MEDICAL HEROISM.

AT the closing exercises of the fourteenth session of the United States Naval Medical School, at Washington, D. C., on April 12, 1916, the commencement address, on "The Humanity of Surgery," was delivered by Dr. Hubert A. Royster, of Raleigh, N. C. It contained an account of heroism on the part of the doctor deserving of note in the annals of his profession:

"Surgeons everywhere have been called upon to perform services of the most heroic kind; and, be it said to their credit, they have been found, for the most part, sufficient for their tasks. Even in civil life examples are not lacking. My own state presents an instance of the highest type in the person of Edmund Strudwick, who by one deed would have the title of hero. Not in all the annals of history have I read of nor is it in my mind to conceive of firmer devotion to duty or of more daring fortitude than he exhibited. When near sixty years of age, he was called to a distant county to perform an operation. Leaving on a 9 o'clock evening train, he arrived at his station about midnight, and was met by the physician who summoned him. Together they got into a carriage and set out for the patient's home six miles in the country. The night was dark and cold; the road was rough; the horse became frightened at some object, ran wild, upset the carriage and threw the occupants out, stunning the country doctor (who it was afterward learned was addicted to the opium habit) and breaking Dr. Strudwick's leg just above the ankle. As soon as he had sufficiently recovered, Dr. Strudwick called aloud, but no one answered; and he then crawled to the side of the road and sat with his back against a tree. In the mean time the other physician, who had somehow managed to get into the carriage again, drove to the patient's house, where for a time he could give no account

of himself or of his companion; but, coming out of his stupor, he faintly remembered the occurrence and at once dispatched a messenger to the scene of the accident. Dr. Strudwick was still leaning against the tree, calling now and then in the hope of making some one hear, when the carriage came up about sunrise. He got in, drove to the house, without allowing his own leg to be dressed, and, sitting on the bed, operated upon the patient for strangulated hernia with a successful result. 'Greater love hath no man than this.' ''

The daily heroism of the physician in encountering the incidental risks of his profession is frequently exaggerated; but such conduct as that of the above incident demands a degree of physical fortitude seldom observed except under conditions of war.

Correspondence.

A REJOINDER ON WORKMEN'S COMPENSATION.

Mr. Editor: I wish to make some criticisms of statements in an article in your last issue above the signatures of M. A. Tighe, M.D., and J. A. Mehan, M.D.

When these gentlemen say: "We believe that any act which deprives John Smith, a human being, of his divine right to select his attendant, when either accident or sickness befalls him, is grossly unfair,—no matter who pays the bill,"—I cannot believe they mean or believe what they say. The law specifically states that he shall select only attendants of certain qualifications and holding certain licenses, and if John Smith, paying his own bills, an honest believer in Christian Science or Osteopathy, should select one from these cults as an attendant on one of his family ill with diphtheria or typhoid fever, he would find himself and his attendant in trouble with the law. And the law that would abridge his liberty is an offspring and creation of our medical organization.

These gentlemen also state, "The service offered by the Insurance Associations is positively no better than the workman himself could and would select." This may or may not be true. It cannot be proven or disproven, and it would be idle and unprofitable to discuss it. When the Workmen's Compensation Act compels the employer to care for the workman injured in his employ, it seems but common justice that the employer himself, or through the Insurance Company paying the bills, should have the right, at least, to insist that the injured should be treated only by competent, experienced surgeons, and I think that if these gentlemen were employers, instead of physicians, they would see it in that light. There is no sentiment with Capital; and the employer or the Insurance Company do not select a surgeon because of race, creed, affability or friendship. With them it is a matter of cash results. Their only interest is to see that the injured workman recovers as soon as possible, with the least possible permanent disability, and when, as has recently occurred, a workman with a comparatively trivial injury dies after a long and painful illness from seeming neglect, incompetency, or inexperience on the part of his attendant, the company, in justice to themselves and to their injured workman, should have the right to debar this surgeon from further service in their employ.

A patient in a hospital generally accepts the service of the medical and surgical staff in that hospital without a sense of hardship. If, for personal or other reasons, he prefers someone outside of that staff, he is at liberty to avail himself of that other service, providing he is willing to pay for it. Where are the cases dissimilar?

A too zealous insistence on regulating the relations between the medical profession and society at large has often brought our profession into disrepute from the days of Molière down to the present time.

WILLIAM G. REED, M.D.,
September 29, 1916. Southbridge, Mass.

APPOINTMENTS.

BOSTON CITY HOSPITAL.—DR. JOHN G. BRESLIN has been appointed assistant resident surgeon of the Haymarket Square Relief Station, and DR. BERNARD F. DEVINE resident surgeon of the East Boston Relief Station.

BOSTON DISPENSARY.—DR. MAYNARD LADD has been appointed physician-in-chief of the Children's Department of the Boston Dispensary.

TUFTS MEDICAL SCHOOL.—DR. ANDREW H. RYAN has been appointed professor of physiology, DR. CHARLES H. BAILY associate professor of histology, and DR. ARTHUR L. CHUTE associate professor of surgery.

UNITED STATES CENSUS BUREAU.—DR. WILLIAM H. DAVIS, for some years vital statistician of the Boston Health Department, has been appointed chief statistician of the division of vital statistics of the United States Census Bureau.

SOCIETY NOTICE.

WORCESTER DISTRICT MEDICAL SOCIETY.—The regular meeting will be held in G. A. R. Hall, 55 Pearl Street, Worcester, at 4.15 P.M., Wednesday, October 11, 1916.

PROGRAM

I. Obstetrical Preparedness, by Dr. Charles M. Green, of Boston.

II. Report of Committee to the "First Legislative Convention of Massachusetts Physicians." All members interested in the Workmen's Compensation Act should be present to discuss and act on the report. Attorney Frank F. Dresser will tell us something of the legal aspects of the situation and what we may reasonably strive for.

Remember that the censors meet for examinations of candidates on the second Thursday in November. Prospective members should get in touch with the secretary before that day.

ERNEST L. HUNT, *Secretary.*

NOTICES.

MASSACHUSETTS GENERAL HOSPITAL. ETHER DAY EXERCISES.—Members of the medical profession are invited to attend the Ether Day exercises in the Moseley Memorial Building of the Massachusetts General Hospital (entrance on Fruit and North Grove Streets), at 4 P.M., on October 16, 1916.

The address will be given by Dr. Haven Emerson, Commissioner of Health, New York City. Subject:—Preparedness for Health.

CARTWRIGHT LECTURES.—The Cartwright Lectures of the Association of the Alumni of the College of Physicians and Surgeons will be delivered at the College of Physicians and Surgeons, 437 West 59th Street, New York, Tuesday and Wednesday afternoons, October 24 and 25, 1916, at five o'clock, by Richard M. Pearce, M.D., Professor of Research Medicine, John Herr Musser Department of Research Medicine, University of Pennsylvania, Philadelphia. Subject:—The Spleen in its Relation to Blood Destruction and Regeneration. The public is cordially invited to be present.

HARVEY SOCIETY LECTURE.—The first lecture of the course for 1916 of the Harvey Society will be given on October 14, at the New York Academy of Medicine, New York City, by Professor J. S. Haldane, University of Oxford, on "The New Physiology."